2004

Missouri
State of the State
Information
Technology Report

Missouri Office of Information Technology

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Office of Information Technology
2004 State of the State IT Report

Executive Summary

The Report

The State of the State IT Report serves as an annual review of the accomplishments, planned projects and accumulated demand experienced by Missouri's information technology community. Originating through legislation introduced in House Bill 5 of the 1999 state legislature, the following section outlines the report's purpose and timeline.

> *Section 5.225. To the Office of Administration: (1999 House Bill 5)*
> *For the purpose of funding the Office of Information Technology and an annual status report of information technology projects. The report is to be submitted to the Senate Appropriations Committee Chair and the House Budget Committee Chair by December 31 of each year.*

Along with each agency's accomplishments, planned projects and accumulated demand, you will also find pertinent information describing each agency, their information technology division, individuals assigned to strategic committees, and the hardware/software technologies utilized. This information should prove to be an important resource to Missouri's information technology community and other interested entities.

Mission and Goals
The mission of Missouri Information Technology is to make state government more efficient, more effective, and more accessible to its citizens through innovative, time-saving, and cost-saving technology applications. (Information Technology Strategic Plan – Fiscal Year 2004)

Goal – Maximize the efficiency of Missouri's information technology infrastructure.
The state's information technology community continues to support the goal of efficiency with agency accomplishments that improve business processes, share information and data across agencies, and align with enterprise-wide IT architecture standards. The state's Enterprise Architecture continues to mature and establishes a common direction and framework for investment in the state's IT infrastructure. This common architecture,

coupled with the benefits of statewide purchasing contracts, enables the state to leverage its purchasing power, thus resulting in substantial savings. Primary examples this past year of information technology cooperation and collaboration across multiple agencies occurred in the areas of justice integration, e-mail server consolidation and a multi-agency data dictionary developed for the public benefit pillar of Missouri State Government. The year 2004 also saw the completion of the mo.gov migration for web URLs and e-mail address standardization allowing for user-friendly, intuitive electronic addresses. Work is also concluding on the state's e-government strategy and blueprint. When complete, this document will serve as a road map for future information technology efficiencies.

Goal – Performance Management is fully utilized to maintain focus on long-term goals and strategic objectives.
Missouri has much to be proud of in the area of project management. Championed by the IT community, Missouri State Government can now boast of 205 Missouri-certified project managers. The result of this program is more IT projects delivered on-time and within budget. The project oversight program also plays an important role in this overall concept of responsible government. During 2004 five projects received the valuable services of this program. Another emerging program with activity during this past calendar year is the Missouri Value Assessment Program (MoVAP). Currently in the project assessment quotation process (PAQ) phase for the development of an online tool, MoVAP will ultimately serve the agencies as a common methodology to determine the costs and benefits of information technology projects. In the future the information obtained from this program will be critical to the appropriation process in determining budgets and funding.

Goal – Strengthen the role of information technology in Missouri State Government.
In relation to this goal much was accomplishing during 2003 with Executive Order 03-26 establishing the office and role of the state's Chief Information Officer (CIO) and the corresponding cyber security policy outlining duties and responsibilities related to this important area. In 2004 the executive order and policy continues to provide a framework to carry forward the state's information technology direction. The state's IT community is also served by a newsletter and the recent award of a PAQ for a marketing plan to promote the awareness and value of information technology in Missouri State Government. Outreach efforts occur in projects such as the e-government initiative, currently in its beginning stage, to assist cities and counties with obtaining an Internet presence and the ability to cost-effectively provide e-services to their citizens. The Missouri Digital Government Summit, held for the second time in 2004, reaches the city, county and state IT and business community to promote awareness and collaborative solutions to providing better government to citizens.

Quick Facts
The following statistics are gathered from the individual department/agency reports and profiles included in this document. Please bear in mind not all departments provide an annual report and some of the annual report participants are agencies or divisions of a

larger department. An example of this would be the Missouri State Highway Patrol, an annual report participant, who exists as a division of the Department of Public Safety.

	2002	2003	2004
Total number of participating departments/agencies	22	23	23
Total number reporting an assigned security officer	16	18	19
Total number reporting an assigned privacy officer	6	8	8
Total number of Missouri certified project managers	146	152	205

Conclusion

The one constant in life is change – nothing stays the same. This was evident during 2004 with a number of changes that occurred and are still in the process of unveiling in the state's information technology community. Gerry Wethington, the state's Chief Information Officer, began his retirement at the end of November, ending a state IT career spanning approximately 30 years, the last 4 as the state's second CIO. Gerry contributed much, both locally and nationally, in the areas of information technology architecture, cyber security and information technology policy and strategic planning. As this year concludes Bill Perkins, also serving as the Deputy Director for the Missouri Department of Revenue, stepped in as the interim CIO providing his leadership and direction during this transitional time. November saw the election of a new Governor for the state and the beginning of change in leadership and direction. A new CIO, Dan Ross, has been appointed and will take the CIO's reins with the beginning of the new Governor's administration on January 10, 2005. With Dan's long-time experience in state government, he brings a wealth of knowledge to this key position.

During the past year the information technology community again weathered tough budgetary times. It is a compliment to the state's IT community to view within this report just how much was accomplished in spite of the economic challenges. Because information technology is now considered mainstream and a critical component in the delivery of services, the demand continues to grow for application development, network bandwidth and the challenges that come with providing mobile computing to an ever-changing workforce. Missouri's information technology community continues to explore opportunities for consolidation and outsourcing of its IT infrastructure. This approach to potential cost savings will continue to be examined during the upcoming calendar year.

As demonstrated by the 2004 State of the State IT Report, the accomplishments and challenges are many within Missouri's information technology community.   The following department reports will show the tremendous amount of work accomplished during 2004 and reveal the challenges ahead for 2005. Please review these specific department reports and discover the wide range of IT accomplishments and future

projects now on the drawing board that will ultimately serve to improve Missouri State Government for its citizens.

The 2004 State of the State IT Report can be downloaded at www.oit.mo.gov and select "Reports and Plans".

Office of Information Technology
2004 State of the State IT Report

Office of Information Technology

Overview

The Office of Information Technology (OIT) serves as the focal point for the state's information technology issues, policies and initiatives. Directed by Missouri's Chief Information Officer, Gerry Wethington, the organization is responsible for areas such as IT policy, strategic planning, e-government, enterprise architecture and standards, to name just a few. Listed below are the highlights of the major initiatives supported by this office. Many of these initiatives cross multiple years and exist as ongoing projects within OIT and will continue into this next calendar year and beyond.

E-Government

In 2004 e-government continued to make progress with what was available from re-appropriated funds originating in FY02. Alternative funding sources, such as fee-based services for online convenience, continue to be explored, but a viable solution and pilot project for such funding is yet to be identified. As of October, 2004 an e-government appropriation request totaling $3,666,000 has been submitted to the Office of Administration Budget and Planning and is waiting approval for inclusion in the FY06 Governor's Recommended Budget.

E-Government Services and Infrastructure

Regardless of the shortage of funds for technical infrastructure, many agencies moved ahead to make online services available through their own limited funding sources. This fact is reflected in the number of accomplishments listed under each individual agency. The Missouri portal currently reflects 23 online services available and continues to work to expand the offering. The "Starting a New Business" project continues to move forward as a multi-agency initiative. This initiative will serve as a pilot that will allow real-time, cross-agency transactions. When complete, the application will allow citizens the ability for one-stop services and information for business startups.

Work began during 2004 in the State Data Center with staff training and testing of the IBM WebSphere portal environment. Implementation of this e-government solution will provide the state with greater online capabilities and an opportunity to run applications that cross multiple agencies. Existing e-government applications are being applied in the test environment and research is underway concerning the impact to the current

computing environment and network capacity. Plans are being formulated to move existing e-government applications to the IBM WebSphere environment in the near future.

City/County E-Government Initiative

A current e-government initiative is a collaborative effort between the Office of Information Technology, the Missouri Commission on Intergovernmental Cooperation and the Missouri Association of Counties to bring website presence and e-services to city and county government. Missouri consists of 114 counties and one independent city. Currently 25 counties have a website presence, but only three of those counties offer e-services. If counties offer e-services, it is typically in the area of paying for taxes, traffic tickets, or various licenses and permits. There are 946 cities in Missouri and of those cities there are 119 cities with a population of 5,000 or greater. Only 19 cities offer one or more e-services. Like the counties, these e-services typically fall in the area of tax and services collection as well as licensing and permits. Addressing this issue could produce the opportunity for state, county and municipal government to deliver a suite of integrated e-services to citizens. Opportunities for public/private partnerships are currently being explored to assist Missouri's cities and counties in expanding their e-service offerings. Funding for this initiative is also included in the FY06 e-government appropriation request.

E-Government Business Oversight and ITAB E-Government Committee

During 2004 a cooperative effort began between the ITAB E-Government Committee and the E-Government Business Oversight Committee to create an e-government blueprint and strategy designed to move e-government efforts forward in the upcoming years. This effort received facilitation support, provided at no charge to the state, from Cisco Systems staff specializing in e-planning and solutions. It is anticipated the document will soon be complete and available as support for the e-government appropriation request being submitted by the Office of Information Technology.

E-Government Scorecard

An exciting addition in 2004 to Missouri's e-government program is the E-Government Scorecard. Developed under the direction of Hannah Mao with guidance from Brown and Harvard Universities, this methodology assists Missouri State Government as a tool in assessing the state's portal and agency websites by looking for best practices and areas in need of improvement. The E-Government Scorecard is now available for agency review on the ITAB website, but will be moved to the public side in the near future and used as a tool for continuous improvement and to report agency website ratings.

Portal Refresh

A new Missouri State Government portal was designed and implemented during the fall of 2004. The reorganization of resources on the home page provides a user-friendly view of state government and services for both citizens and state government employees. Many positive comments have been received regarding the updated look and feel of the Missouri web page. In the 2004 Brown University rankings, Missouri did fall this year from 12th to 38th place. It was discovered the portal review and ranking occurred just prior to the new portal design implementation and is believed the state would have

received a much higher ranking if the new design had been available for review. Another major initiative currently underway for the state's e-government portal is the procurement of a search engine to provide enhanced search capabilities. Funding to support such a search engine is included in the FY06 e-government appropriation request.

Mo.gov Standardization

The standardization of agency websites and e-mail addresses to mo.gov was completed during 2004. The migration to mo.gov was necessary due to the public offering of the .us domain. The .gov domain will remain for the use of government entities only, thus providing the public with the knowledge they are dealing with an official state agency.

Multi-Agency Data Dictionary

The Multi-Agency Data Dictionary Initiative completed its work in August 2004 and the resulting data dictionary and related products were handed over to the Architectural Review Committee for review and inclusion into the state's enterprise architecture information domain. With participation from DMH, DSS, DHSS and DESE – Vocational Rehabilitation, the project was completed on time and within budget.

The data dictionary project identified and reconciled sixty-six client name and demographic-related attributes which involved identifying data types, lengths, and valid values and descriptions. They reviewed six agency applications in the process of extracting the common data elements, compared these with national standards, mapped the attributes to the existing systems and aligned them with Missouri's GIS addressing standards.

This effort has truly been one of cooperation and collaboration. The multi-agency data dictionary is an initial step toward an online client intake application that will require the client to give name and demographic information once rather than multiple times. In the fall of 2004 the Personal Independence Commission (PIC), co-chaired by Lt. Governor Maxwell, recognized the efforts of the participating agencies and issued a letter in support of future progress and funding. As a result of the cooperative effort across the four public benefit pillar agencies, Missouri now has a multi-agency data dictionary for online application development that will carry it into the future and facilitate the sharing of information across agencies.

Missouri Digital Government Summit

The second Missouri Digital Government Summit was held June 17, 2004 at Jefferson City's Capitol Plaza Hotel. The summit provided the opportunity for state, county and municipal government information technology and executive staff to share electronic government ideas and information. The audience of 246 had the opportunity to learn about issues such as privacy, enterprise architecture, cyber security, business continuity/disaster recovery, as well as many IT-related subjects. Coordinated by the Office of Information Technology and the Government Technology Executive Leadership Forum, the financial support provided by numerous information technology companies made it possible for the summit to be held free of charge to government staff.

E-Government Recognition

Notable recognition for Missouri's e-government initiatives during 2004 include the following:

- The Public Service Commission's Electronic Filing and Information System (EFIS) received the National Association of State Chief Information Officers' (NASCIO) 2004 Recognition Award for outstanding achievement in the field of information technology in the category of Digital Government – Government to Business.

- The Digital Media Developers Group was recognized with the Governor's Award for Quality and Productivity for their work on an automated system for posting news headlines on the Missouri State Portal.

- The Department of Revenue's Internet Notice of Lien Filing and Record Team received the Governor's Award for Quality and Productivity for the creation of an online system that allows qualified individuals to file, perfect, and/or research liens.

- The Multi-Agency Data Dictionary Team received the ITAB's Missouri IT Recognition Award for their collaborative effort to develop a data dictionary for online application development that will serve the public benefit pillar of state government.

- Missouri's Judiciary branch was one of seven organizations honored by the American Council for Technology for its Intergovernmental Solutions Award. This award was given to recognize their contribution to the Global Justice XML Data Model and Data Dictionary that will provide the basis for the Missouri Judiciary to begin developing a system that will permit the electronic submission of data from many sources into a single, automated system.

- Bonnie Kliethermes, DOLIR, was presented the ITAB's Missouri IT Recognition Award for her contribution to the Unemployment State Tax Automation Reporting System (USTAR). This project will provide a way for the approximate 130,000 employers of the State of Missouri to be able to conduct unemployment insurance tax business electronically via the Internet.

IT Accessibility Standards

The Digital Media Developers (DMD) group developed a good working relationship with the Office of Information Technology and put together a set of proposed web guidelines that is being reviewed by web developers across the majority of state agencies. Once approved and finalized, the guidelines will be published on the DMD website for all state web developers to use. Members of the DMD are working with the architecture interface domain to identify standards for the Missouri Enterprise Architecture. The Office of Information Technology continues to work with the Missouri Assistive Technology Council and the Division of Purchasing and Materials Management to assure state compliance with the provisions of RSMo 191.863 and Section 508 of the Workforce

Investment Act of 1998 regarding accessibility of information technology for individuals with disabilities.

Strategic Planning

The Missouri Information Technology Business Plan was developed from the 2003-2004 Statewide Information Technology Strategic Plan. The business plan consists of a description of Missouri's IT functional business structure, an action plan for supporting IT goals and the strategic plan as well as the 2003-2004 work plan and budget. The business plan is available on the OIT website.

Project Management Initiative

The Missouri project management methodology continues to mature and the Risk Management and Performance Management committees have finalized work on the methodology manuals, thus gaining ITAB buy-in and approval in both areas. The new methodology manuals have been published on the OIT website and are being used in the management of Missouri information technology projects.

New requirements have been incorporated into the budget instructions for information technology decision items. Agencies must have a Missouri certified project manager that will be assigned to manage their information technology projects, or must include costs to pay for a PMP certified project manager to be contracted through the IT consulting services contract for all IT projects. Agencies must also include language in their request addressing how the project will be developed in compliance with the state's enterprise architecture.

Agencies are also required to submit to the Office of Information Technology a risk management plan for IT-related decision items. The risk plan is then reviewed by a risk review committee consisting of representative agency CIOs and a representative from the Office of Budget and Planning. For large information technology projects, agencies must include in their budget requests a 4% assessment to pay for the oversight program costs to be administered by the Office of Information Technology. The continuing education and certification program is fully functional and a new Missouri Project Management Certification Handbook has also been developed to assist Missouri certified project managers with their professional development and continuing education requirements.

- **Performance Management:** The Missouri Performance Management manual is complete and has gained ITAB approval and is published on the OIT website. The manual outlines the standard framework to measure the performance of major information technology initiatives and their contribution to program performance. The performance reference model connects work on the technology side of a program such as upgrades or consolidated systems to outcomes on the service side. A vitality process has been developed to review and update the manual on an as-needed or annual basis.

- **Risk Management:** The Risk Management Manual is now complete and has gained ITAB approval and is published on the OIT website. The manual is to be used as a guideline to assist project managers in identifying risks associated with

a project and ensure those risks are well understood so they can be managed, planned for, and mitigated during the execution of a project. A vitality process has been developed to review and update the manual on an as-needed or annual basis.

- *Missouri Value Assessment Program (MOVAP):* The Missouri Value Assessment Program is a methodology developed to provide a common budget methodology across all agencies and assist in determining whether the cost to create, implement and maintain a project is greater than the value/savings returned to state government and ultimately the citizen. While some business projects will truly generate a financial return on investment, others will only generate goodwill or better service and improved citizen satisfaction. This program is designed to uncover these issues and contribute to fully informed decisions.

  The program continued to evolve during 2004 under the direction of the Project Management Standing Committee. The vision is to have an IT application that will encompass all of the project management business areas (performance, risk, MoVAP, and oversight) that will make data entry and calculations easier for the project manager/end user with the goal of gathering pertinent information once rather than multiple times across these business areas. MoVAP was chosen as the primary business area for development with the other areas to be developed in phases. To reach this goal, a project assessment quotation (PAQ) was developed, reviewed and finalized for bidding. Three consulting company vendors will be bidding on the analysis, design and development of the MoVAP application with the bids due in late January 2005.

  During 2004 the University of Missouri's School of Business chose the project of researching and creating a three-tiered dashboard that would give state staff from the executive level to the project manager level appropriate high-level information indicating the status of IT projects. Through interviews with state staff and research of the project management processes, the graduate school team created a dashboard and its corresponding analytical methodology that was presented at the April 2004 ITAB meeting.

Oversight of Missouri's Information Technology (IT) Projects

Statistics regarding national failure rates of information technology projects are disturbing. In a recent report published by research firm META Group, *Project Management Essentials Delta 2767, 12 February 2004*, 72% of all IT projects are late, over budget, lack functionality, or are never delivered as planned. According to their research, 95% of IT projects that experience cost overruns also suffer from scheduling problems, and these variances translate directly to increased risk and cost.

To protect the state's technology investments, the Missouri Project Oversight Program was developed to provide an efficient (low cost) and effective (proactive, collaborative, federated) means to oversee the state's many important information technology projects.

The cost of performing Project Oversight is comparable to a very valuable insurance program. While the program does not guarantee project success, it does guarantee that

the project receives the highest level of opportunity to meet the expectations of all those involved to achieve its stated goals and objectives. A few of the benefits realized through the Missouri Project Oversight Program include:

- Cooperation – promoted among the important business partners
- Communications – that facilitate successful projects and manage expectations
- Training – recognized early and at key points to ensure progress and continuity
- Documentation – providing projected, current, and past progress as well as an inventory of project artifacts
- Performance – of the technical team and project manager that minimizes distractions and focuses efforts
- Cost Savings – through leveraging statewide knowledge and experience providing refinements and improvements to collective state knowledge base
- Cost Avoidance – through proactive and early identification of potential problems and issues

The Office of Information Technology manages the operation of the Missouri Project Oversight Program. As projects continue to grow in both complexity and size and statewide integration continues to drive IT decisions, the use of Project Oversight will provide substantial economic benefits. A recently produced report demonstrated that applying the oversight process helped state agencies optimize resources and achieve greater project performance. The value achieved through the investment of project oversight was greater than the actual cost of oversight itself.

During 2004 the Missouri Project Oversight Program was utilized for the following projects:
- Department of Mental Health's CIMOR Project
- Department of Revenue's FASTR Project
- Missouri State Highway Patrol's DWI Project
- Department of Higher Education's State Programs Integration Project
- Secretary of State's Voter Registration System

Network Management
The Network Management Consortium facilitated both a statewide fixed and mobile (in-motion) satellite equipment and services contract this past year. The consortium has also developed the most complete statewide inventory of network assets ever compiled and has been instrumental in helping to achieve proofs of concept for collaborative network services within the state. Two examples include multi-agency tenants in the Lindberg and Jennings service centers where the agencies collaborated to share a common network rather than individually installing their own. With ever-changing business needs, capacity expansion and the evolution of network technology, the consortium will be addressing issues such as Voice Over Internet Protocol, Internet 2, convergence of wired and wireless technology, satellite communication, the use of fiber in the state and wireless data communication.

Information Sharing & Data Exchange Among MO's Justice Agencies

The efficient sharing of data among justice agencies is an important goal for Missouri State Government. With this objective in mind, the Office of Information Technology is working to identify and help solve the information management problems state and local justice agencies are confronted with by establishing standards and protocols for sharing information. The OIT serves in an advisory role to provide vision, strategy, policy approval and oversight for development and implementation of agency, law enforcement and juvenile and family court information sharing. Those efforts include:

> ***Criminal Justice Information Sharing Project*** sharing information at all levels of government within the state and all disciplines within the justice community to ensure more complete, timely information is available to the criminal justice system for the important decisions that shape people's lives and the safety of our communities.

> ***Driving While Intoxicated (DWI) Tracking System*** integrating systems and sharing information between the courts and justice, public safety and licensing agencies to provide data on DWI offenses by geographical location, sanctions, and demographic groups. The ability to collect and analyze this data will enable the Division of Highway Safety and other agency program initiatives to be targeted more effectively throughout the state, resulting in more efficient use of dollars and improved program results.

> ***Transition from Prison to Community Initiative*** sharing information between justice, public safety and social service agencies to improve offender assessments and implement effective case management. The potential advantages of aggregating data about offender assessments are substantial and provide the ability to integrate transactional, geospatial and demographic data to optimize public services.

> ***Juvenile Justice Information Sharing System (MOJJIS)*** sharing information between agencies, juvenile and family courts for better assessment, intervention, and tracking of juveniles across agency boundaries. Data sharing will reduce duplicate services and provide more appropriate treatment during a juvenile's contact with the agency.

Policy Manuals

During 2004 two policy manuals were developed that impact the Office of Information Technology. The OIT policy manual addresses the operational responsibilities within the Office of Information Technology and provides details for the administration of programs and duties provided by OIT staff. The OIT and ITAB policy manual addresses the operational responsibilities of the OIT in relation to support of the Information Technology Advisory Board and the ITAB's chairperson. This manual also identifies the responsibilities of the ITAB chairperson and support staff in providing information to the OIT. Both policy manuals are available on the OIT website.

CyberSecurity Specialty Code

During this past year the need was identified to add a CyberSecurity specialty code to the existing IT specialty codes within the state's merit system. Through the efforts of the ITAB Personnel Committee, a document proposing CyberSecurity specialty code education and experience requirements was created. As a result of this initiative it was decided to do a review of all IT specialty codes and to provide education and experience requirements as well as examples of duties in a format identical to the CyberSecurity specialty code. At the end of 2004 this project is nearly complete and is anticipated to be presented to the ITAB for final approval in January 2005.

Recognition Awards

For the past calendar year two awards were presented with the assistance of OIT for ITAB's Missouri IT Recognition Award. These two awards were:

- Presented in October 2004 to the Multi-Agency Data Dictionary Team for their collaborative effort to develop a data dictionary for online application development that will serve the public benefit pillar of state government.

- Presented in November 2004 to Bonnie Kliethermes, DOLIR, for her contribution to the Unemployment State Tax Automation Reporting System (USTAR). This project will provide a way for the approximate 130,000 employers of the State of Missouri to be able to conduct unemployment insurance tax business electronically via the Internet.

IT Mentor Program

In early 2004 the IT Mentoring Program website was completed with online application and evaluation forms made available for electronic submission. The program is located on the ITAB website. During the calendar year of 2004 the departments of Labor and Industrial Relations, Agriculture, Public Safety, Ethics and MOSERS acquired new CIOs. Of the changes within those five agencies, four of the new CIOs elected to participate in the IT Mentoring program and were assigned mentors from other state agencies. Of the five new CIOs, four had previous state experience prior to their appointments. The four new CIOs will work with their assigned mentors for the period of a year.

Information Technology Purchasing Policy

This policy directive was developed and obligates State of Missouri agencies to institute a policy that requires purchases of information technology goods and/or services to be approved by the agency CIO or equivalent position, for the SAM II information technology object codes that were approved by the Financial Management Advisory Committee (FMAC) and the Information Technology Advisory Board (ITAB).

Vulnerability Assessment Methodology Policy

This policy directive was developed to provide state agencies with a way to determine the current status of security programs and controls in order to make informed judgments and investments that appropriately mitigate risks to an acceptable level.

Missouri state agencies must annually complete a vulnerability assessment using the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-26 Security Self-Assessment Guide for Information Technology Systems. A completed copy must be submitted to the Office of Information Technology in the first quarter of the calendar year. Each agency may choose to perform the assessment themselves or contract with an independent third-party as identified by the established State of Missouri contract.

Security Assessment Questionnaire Policy

This policy directive developed a questioner to be used by agency officials to measure the current status of their security programs and controls in order to make informed judgments and investments. Missouri state agencies should annually complete the security assessment questionnaire in the first quarter of the fiscal year and submit a copy of it to the Office of Information Technology.

The National Institute of Standards and Technology (NIST) has issued a Vulnerability Self-Assessment Guide for Information Technology Systems. This assessment has been distilled into a few key questions in each of three areas: Management Controls, Operational Controls, and Technical Controls. This questionnaire is deigned to provide a cost-effective technique for agency officials to determine the current status of their information security programs, mitigate identified weaknesses and where necessary, establish a target for improvement.

Homeland Security

The Office of Information Technology continues to be involved with the statewide effort by participation in several of the homeland security committees. Representatives from OIT serve on the Missouri Security Council and the Deputies Council and OIT chairs the Cyber Security and Business Continuity committees.

The OIT, in collaboration with the Cyber Security committee secured federal funding to work in the areas of cyber security policies, procedures, and training for 33 ITAB voting member agencies. Work is expected to begin early 2005.

The OIT, in collaboration with the Office of Administration and the Business Continuity committee, secured funding to develop Continuity of Operations and Continuity of Government (COOP/COG) plans for the Office of Administration. The COOP/COG documentation and templates will then be pushed to all departments to help them develop their COOP/COG plans.

CIO and ITAB Website Project

The Office of Information Technology maintains both the CIO's website and the Information Technology Advisory Board's website to provide an efficient and effective means to share statewide policies, processes, best practices, lessons learned, and other information within the state's IT community. Additionally, the websites provide access to information about the Office of Information Technology and the many statewide initiatives under its direction.

Consolidated Purchases Program

The Consolidated Purchases Program allows all state agencies to take advantage of desktop PC, laptop, and printer volume purchase opportunities under the Prime Vendor contract. All agencies, whether large or small, can purchase products at the best possible manufacturer discount. Once an agency has placed an order for a product, other agencies can take advantage of the particular discount pricing, provided the same product specifications are needed. If planned ahead, agencies can coordinate their buying needs by consolidating purchases into one order to achieve steep discounts with more flexibility on product specifications. The Information Technology Advisory Board (ITAB) website allows agencies to communicate their planned purchases with other ITAB members and to view lists of planned purchases.

Research and Advisory Services Contract Management

The state employs IT staff that require rapid access to information research and advisory support to assist in; policy-making, resource planning and management, project development, management and evaluation, vendor assessment, purchase decisions, contract negotiations and industry trend analysis. The Office of Information Technology manages a statewide contract so agencies receive technology research, advice and insight to support IT decision making. These services are accessible via the Internet, telephone and e-mail.

IT Marketing

The Office of Information Technology is in the early stages of developing a statewide information technology marketing program. Specifically, the program focuses on marketing the positive outcomes of work performed by Missouri State Government agencies through the use of information technology, and looks at how agencies have implemented technology to solve business challenges.

IT Expenditure Reporting

Information technology has become a significant enabler for the delivery of government services. In order to effectively manage the state's information technology investments it is essential that we are able to account for the expenditures made on information technology. Several recent practices have improved our ability to effectively determine

the total cost of information technology for the state, including the implementation of a consistent chart of accounts using IT object codes, and the issuance of unique organization IDs in SAM II for information technology divisions or units. The addition of a standard set of IT function codes will further improve our ability to categorize expenditures into meaningful groups.

Missouri Adaptive Enterprise Architecture

A continuing effort for the Office of Information Technology is the development of an Enterprise Architecture (EA) that facilitates information and data sharing across departmental lines of responsibility. Statewide technology standards, guidelines and best practices are developed within domain working groups comprised of state Subject-Matter Experts (SME), thus making Enterprise Architecture a true state deliverable.

Currently there are seven active Enterprise Architecture Domains that serve as working groups, developing the technical standards. These domains are:
- Application Engineering Domain
- Information Domain
- Infrastructure Domain
- Interface Domain
- Interoperability Domain
- Privacy Domain
- Security Domain

The Application Engineering Domain focuses on application development and programming tools and methodologies. The Information Domain focuses on geographic information technologies, data management, databases, and knowledge management. The Infrastructure Domain focuses on network and platform technologies. The Interface Domain focuses on the interaction between internal and external customers and the State of Missouri through web browsers. The Interoperability Domain focuses on sharing of data and information within and between agencies. The Privacy Domain focuses on privacy issues which affect information security. The Security Domain focuses on the security of the state's IT assets and infrastructure.

As the domains develop technology blueprints in the best interest of the state, the blueprints are passed through their governing body, the Architecture Review Committee, (ARC), which is a representative body of ITAB members.

There have been 176 IT standards, guidelines, and/or best practices developed, which institutes a 214% gain up from only 56 blueprints at the close of calendar year 2003. Almost all blueprints can be found at http://oit.mo.gov/architecture/tamain.htm.

Enterprise Architecture has led the adoption of one e-mail system for the State of Missouri, thus allowing better interoperability across state agencies. Standard desktop, laptop and printer specifications have been developed which allow state agencies to pool their resources and leverage the state's purchasing power to a great extent through bulk purchasing.

Missouri Revised Statute in 2004

Chapter 210.870 establishes the "Juvenile Information Governance Commission" and appoints the Chief Information Officer of the Office of Information Technology of the Office of Administration to the commission.

For more information regarding the State of the State IT Report contact:

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Office of Administration

Accomplishments

Technology Services

MO.GOV URL Initiative
The effort to change the state's URL continued in 2004. All agencies now use mo.gov for their URL. The old address, state.mo.us, should be gone as an alias by January 2005.

MO.GOV Email Initiative
All agencies have changed their email address to mo.gov during 2004.

Redundant Internet Access Point
The redundant Internet access point on the east side of Jefferson City was completed in the summer of 2004. The access is provided by a different carrier and route than the access in the Truman Building. The new 10 Meg access will be used primarily for disaster recovery. Plans are being considered for making the redundant access a fail-over or using it to load balance the Internet traffic.

SDC Physical Infrastructure
During 2004 work continued to improve the 20 year old Data Center physical infrastructure. The Truman Building UPS system was replaced. There are now 2 UPS systems online, along with the generator. Planning began to replace the Halon system with FM2000.

Blade Center
A Blade Center was acquired that centrally houses servers. The Data Center went from no blade servers to currently over 50 servers. Applications on the blades include email, Domino servers, and statewide mail relay servers.

Telecommunications Contracting Efforts
Several statewide contracts were awarded or amended in 2004. Contracts were awarded for stationary satellite service, Blackberries with data and voice, IVR systems, and collect calling services in the release centers of the Department of Corrections.

Telecommunications Management System

In 2003 a team was formed to evaluate the efficiency and effectiveness of the 13+ year-old billing system for telecommunications services. That resulted in a RFP for a system that would provide order tracking, inventory, Telco payment tracking and billing to our customers. A contract was awarded in mid summer to Compco for their My Soft system. The software is currently in-house and a team from telecommunications, fiscal services, and systems and programming are working to convert data from the billing system and various Access databases into My Soft. It is anticipated that the system will go into production mid 2005.

Security Assessment

In 2004 ISS was contracted through Rose International to do a security assessment of Data Center security and that part of the state's network which is the responsibility of Technology Services. The study identified several areas for improvement. Some of these were in the area of policy/procedures. Other recommendations were for in-depth security within the network. The report was used to justify a request for a Homeland Security grant to further secure the state's network infrastructure. It also includes biometrics for physical security within the Data Center.

Email Consolidation

As a result of the ITAB/OIT initiative to centralize state email on one platform, Exchange, Technology Services has begun work to host AD and Exchange for all agencies. Work teams, which include the agencies, have been formed. These are technical groups that work to define the policies and practices to be followed in the consolidated environment. The first deployment of centralized services will be for OA in January 2005. A schedule is being developed to define the agencies' migration path.

Contract Negotiations

Recent contract negotiations have netted a decrease of $839,000 per year in software maintenance. This is a reduction of previously committed dollars.

Missouri Technical Training and Education Center (MOTEC)

MOTEC is dedicated to promoting information technology (IT) training throughout state government and facilitating access to IT training and education for approximately 1,450 IT staff. MOTEC provided 2,517 IT state staff with 5,228 days of classroom IT training. This provides convenient, quality training with cost savings to the state by not having travel expenses for staff in the local area.

MOTEC has coordinated statewide access to contractually provided computer-based training. MOTEC has also developed an in-house, centralized development base for web and network computer-based training.

Systems and Programming

Statewide Advantage for Missouri (SAM II)

- The baseline system was maintained at current software release levels as posted by the software vendor (CGI-AMS).
- Staff tested a new automated process for W2C (W2 corrections) as mandated by the IRS.
- A Warrant Intercept project was completed and pending final review by the Department of Revenue. New programs were written to intercept vendor checks that the Department of Revenue has flagged for vendors owing state taxes.
- Major software release updates were installed and tested for the Financial Fixed Assets subsystem.
- Major software release updates were installed and tested for the HR Position Control subsystem.
- Several large data volume tables in the HR Data Warehouse were optimized to save costs and make more efficient.
- Several new reports were completed in Financial for MBE/WBE.
- Staff worked with agencies to maintain and support the Financial Security tables and review proper user access.
- Reports in HR were added and modified as requested by STAC (State Training Advisory Council) and SHRMC (State Human Resource Management Council).
- New reports were created as a result of findings cited by a HR audit.
- HR transactions were loaded and reviewed for the FY05 Cost of Living Adjustment (COLA). Special provisions were developed for the Highway Patrol and Probation and Parole employees.
- Staff assisted the Departments of Natural Resources, Mental Health, Health and Senior Services, Social Services, the Secretary of State, and the Office of Administration for an automated process on FYE mass reorganizations. Over 2,500 employees were affected in HR.
- HR transactions were created for the Missouri Veterans Commission to change all work locations for the Mount Vernon Veterans Home.
- New budgeting reports were created for BRASS as requested by the Division of Budget and Planning.
- Various system changes were made to accommodate the new ACH vendor that was awarded to Central Bank.
- Staff created and loaded transactions for the 2005 health care rates and plans, and the cafeteria plan deductions.
- Many vendor interfaces were converted from a physical tape to an FTP process.
- Staff created and loaded transactions for the 2005 Charitable Campaign deductions.
- Staff participated in the statewide SDC Disaster Recovery Drill. Staff tested and documented recovery procedures for HR and Financial as well as executing various cycles.

WEB Projects
- Maintained web pages for: State Portal, Governor, Lt. Governor, Homeland Security, Office of Information Technology (OIT), Administrative Hearing Commission, SAM II, various divisions within OA, and MOTEC.
- The FY 2005 Executive Budget was posted for fast and easy viewing of the budget by the public.
- A web-enabled employment application was developed and supported for the Transition offices of the Governor, Lt. Governor, Treasurer, and Secretary of State.
- Created Transition websites for the Governor-elect, Lt. Governor-elect, State Treasurer-elect, and Secretary of State-elect.
- Developed a new website to post all statewide Open Meetings Notices.
- New websites were created for Assistive Technology and Governor's Council on Disability Commissions.
- A new Missouri State Employees Charitable Campaign web site was developed.
- A new Missouri Minority Business Advocacy Commission website was developed.
- A redesign of the Administrative Hearing Commission's website was posted to track Dockets and Hearing Schedules.
- A new Telecom Order Visibility website was posted to allow agencies to track their telecom orders with OA.
- Created a new website for the Office of Equal Opportunity (OEO).
- Created a new website for the Division of Personnel to track training hours for the State Management/Supervisor Training Rule.
- Created a new website for the Smart Buy initiative.
- Created a refresh of the state homepage on November 1, 2004.

Server Projects
- Multiple Blackberry server upgrades were completed.
- The T-Metrics telecom software was upgraded for the State Telephone Operators.
- An Oracle upgrade was completed for the SAM II budget system (BRASS).
- The SAM II Online Bid Server was upgraded to Windows 2000 and SQL2000.
- Specialized software (HSIN – Homeland Security Information Network) was installed for Homeland Security.
- Servers were configured including SQL databases for the new Telecom Management System.
- Various changes were made as a result of the Internet Security Systems (ISS) audit. Security policies were added or amended.
- Planning for the OA Windows2003/Active Directory upgrade was completed.
- Replaced the OAPRIME file server.
- Relocated the Division of Design and Construction's servers to the State Data Center.
- New servers were installed and configured for the State Print Shop.
- Installed and configured the iTest web based typing examination software for the Division of Personnel.

- Upgraded SAM II Helpdesk Software (Track-IT).
- Upgraded the Micromain system – a work order tracking system for the Division of Facilities Management.
- Installed and configured a web based Conference Room Scheduling Software for the Division of Facilities Management.
- Over 400 new Dell workstations were purchased, configured, and placed at all divisions within OA.
- An E-Policy/McAfee Anti-Virus upgrade was installed for all OA desktops.
- Provided ongoing support of Imaging for OA.

Electronic Application System (EASe)
- EASe is a web-based solution developed with the Computer Associates' All Fusion development toolset. EASe is Java-based running under a WebSphere server with a DB2 database on the SDC mainframe.
- EASe is a large development effort done solely by IT staff in OA without outside contractual assistance.
- EASe is an extension of the Management and Applicant Information Resource System (MAIRS) that will allow applicants to apply via the internet for jobs in the state Merit System.
- EASe will allow applicants to more easily apply for jobs and eliminate the burdensome current paper application. Also, for many jobs, EASe will ask the applicant a series of questions that are pertinent to the job and immediately calculate a score based on the applicant's responses. The applicant's name will immediately be added to the register for possible consideration on subsequent certificates. This process used to take weeks and was a manual effort by the Division of Personnel.
- All correspondence from the Division of Personnel such as Grade Notices and Exam Schedule Notices will be sent via email. EASe will generate the appropriate email to automatically send to the applicant. This new process alone will save thousands of dollars in postage and hours of time and effort to data entry the current paper application.
- Several enhancements were also done to MAIRS such as: provide agencies the ability to print an applicant's 'resume' from data collected in EASe, generate an email instead of printed correspondence for all applicants who still apply with a paper application but supply an email address, discontinue scheduling typing performance tests for applicants since they will be taking an on-line typing test, provide Division of Personnel the ability to create questions and values by job class to be used in applicant assessment in EASe, etc.

Fleet Information System (FIS)
- A new production version of FIS was implemented on June 1, 2004. The upgrade closed 14 work orders that the Division of General Services had requested for changes to the system. Enhanced functionality includes: allow agencies to designate when an oil change is due by either months or miles and provide reporting capabilities on data entered, require agencies to specify commuting miles as either exempt or reportable, associate valid fuel types to fuel

configurations, require function specific vehicles to be broke out as to the type of function they are being used for, etc.
- The worksheets generated for the Department of Natural Resources were changed to meet their new requirements.

Telecom Management System (TMS)
- TMS is a new system that was purchased from COMPCO through the competitive bid process. It will replace the Telephone Billing System (TBS) and provide new functionality in the orders processing, and invoice and billing reconciliation.
- The new solution was a result of a Missouri Results Initiative (MRI) that reviewed the old telephone billing unit process.
- TMS will allow agencies to enter their orders via a web browser, receive electronic copies of their invoices, perform ad hoc reporting, and much more functionality.
- TMS is a web-based system that runs on a Windows server with a SQL database.
- Conversion programs have been written to extract data from TBS.
- Parallel tests were done against the TBS production cycle.
- TMS will be moved to production in early 2005.

Risk Management System
- Several changes were made to the system to remain compliant with the Division of Workers' Compensation (DOLIR).
- Other new reports were also created along with additional payment edits.
- Modifications were made to the Purge criteria and modules.
- Reports were modified to meet new needs for the Department of Insurance.

Lease Management System (LMS)
- A major enhancement was implemented to allow Recurring Payment Voucher (REPV) document processing in SAM II Financial. Previously, leasing staff was retrieving data from LMS and combining it with other data in Excel spreadsheets to obtain the information needed to complete the REPV document. Users can now obtain all REPV data needed in LMS.

Office of Equal Opportunity (OEO) System
- An enhancement was added to create a new minority-reporting category for Hispanics.
- Several changes were required to use the 2000 census data for the first year and accommodate its new format.

State Data Center Billing (SDC) System
- New reports were added to display SAM II costs by agencies. This reporting request was originated and approved by the SDC Steering Committee.
- Modifications were made to the system as a result of a CICS upgrade and a new duplex printer placed into service.

Telephone Billing System (TBS)
- A new billing site for Camdenton was added.
- A new billing feature was developed for the new Voice Mail System.

E-Government Initiative
Working with the Missouri Commission on Intergovernmental Cooperation, the Missouri Municipal League and the Missouri Commissioner's for Regional Planning to develop a pilot project for E-services in counties and cities. Currently the committee is looking at what counties and cities to use for a pilot. A Request for Proposal (RFP) will be developed to select a solution provider for the pilot. Some funds have been requested from the Office of Information Technology, but we will look at grant options. A considerable amount of research has been completed in breaking down population numbers within the cities and counties. We have also looked at what counties and cities currently provide E-services.

Additional accomplishments in the area of e-government are:
- Completed the new Missouri E-government report card. This report presents the first year of examining features that are available online through the Missouri State Homepage and it's departmental websites. The results of this examination rely on certain criteria. The criteria items were adopted from studies done by Brown University and Harvard University. Guidelines to utilize the criteria were set by Missouri's Chief Information Officer.

- Currently looking at a new search engine solution. Our current product is HT:dig, which is freeware, supported by MOREnet. Criteria for the new solution are better performance, more precision in search results and more flexible for indexing pages. The new solution would allow citizens faster and more precise search results.

- An RFP has been created and released for a Community Calendar capability. The calendar would provide a web-based, comprehensive, centralized calendar of events, meetings etc. within or related to Missouri State Government. The creation and hosting of this calendar would be at no cost to the state.

- Work continues on developing a single face or "one stop" for the web presence of Starting a New Business. Today's process requires the citizen to go to each agency's web site for information and instructions. The goal of the new site will be a single face to the citizen with navigation to all of the agencies being done within the application. Certain information would be collected only once and then used to populate various agency requirements. The next step will be to conduct focus groups comprised of counselors and helpdesk personnel working for the Missouri Small Business Development Centers at the University of Missouri. The counselors work across the state. The focus groups will be done using a web cast.

Planned Projects

Technology Services

SDC Physical Infrastructure
During 2005 the HALON system in the HST computer room will be replaced with FM200. The HALON system in the EDP Building will be replaced if funding is available.

Virtual Storage Manager (VSM) Upgrade
The VSM will be upgraded from 1.89 terabytes cache to 3.78 terabytes cache to handle the workload. Tape mounts handled today by another software product called Tape Mount Management will be moved to VSM.

Active Directory Expansion
Technology Services will incorporate several other agencies into the private side Active Directory structure during 2005. A project plan is being developed and will be implemented.

Telecommunication Contracting Efforts
There are numerous services that will be contracted for in FY05. Services included in the list are Centrex or dial tone for the cities served by Sprint including Jefferson City, Long Distance service for the statewide users, PBX/Key system equipment, Calling Cards, Inmate Phone Service in the Correctional Institutions and Inside Wiring for Data and Voice connections. These are all existing contracts that expire during the fiscal years.

Managed WAN Services
The Network Infrastructure group began offering the service of edge device configuration, management and monitoring. This has been used for the various state agencies in out-state locations that have multiple tenants or common needs to bring traffic back to Jefferson City on a shared data network. Service Centers are a prime target for such an arrangement. This group presently manages this type of service for the agencies that are located in the Lindbergh and Jennings buildings in St. Louis. Locations are being looked at for future deployments.

Ethernet/MAN
Work will continue with Sprint to provide an Ethernet option in the Metropolitan Area Network (MAN) service. An Alpha test will begin for 5 or 6 agencies connections in the December timeframe. This would replace the ATM network that is currently in place.

Wireless Campus Network
A wireless network is being reviewed as an alternative method of providing network connections in the campus and other critical locations in Jefferson City. The connections would be used in the event of a disaster or extended outages.

Systems and Programming

SAM II
- Migrate the Warrant Intercept enhancement to production.
- Migrate the W2C enhancement to production.
- Develop new programs and processes to automate Within Grade (WIG) processing in HR.
- Begin initial upgrade and implementation analysis for the SAM II upgrade to version 3.x.

Telecom Management System (TMS)
- Implement the new TMS project. Complete conversion, training, and production installation.
- Provide ongoing support for the database, performance tuning, system upgrades, and general system help and assistance.

Vehicle Maintenance System Rewrite
- The Division of General Services has requested that the Vehicle Maintenance System be rewritten with additional functionality and reporting. They would also like the system to be housed at the SDC.
- Review available technologies and approaches to determine the best solution.

Electronic Application System (EASe)
- Finish and implement the EASe project. Assist with user training and instructions, and move all programs and jobs to the production environment.
- Provide ongoing support for technical assistance, monitor performance and make optimization changes where needed, and provide general support.

Surplus Property System
- Perform Business Process Re-engineering on the current Surplus Property process. Based on those findings, begin a development project for a new automated system.
- Review available technologies and approaches to determine the best solution.
- Research possible solutions by other states.

Email Consolidation
- Work on the statewide email consolidation project to migrate the OA Email Exchange server to the State Data Center.

E-Government - 2005 Missouri E-government Report Card
Update the criteria of the E-government Report Card based upon trends of users' (citizen, business and employee) needs, national and statewide e-government practices and feedback of 2004 Missouri E-government Report Card. Our goal should continue to be making appropriate services available on the Web.

Study of Concise and Complex Portal
Explore and analyze best practices used by other states. Share with the agencies and determine what best practices might be appropriate for our state.

Accumulated Demand

The Division of Information Services continues to have a number of projects scheduled, but due to smaller budgets and shifting resources the start–ups have been delayed. These delays, coupled with agencies looking inward for application development and sever support due to smaller budgets, will increase the accumulated demand. Most of the scheduled projects provide services across agencies on statewide bases.

General Department Profile (2004)		
Department Name		
Office of Administration		
Street Address	City	Zip
Capital Building, Room 125	*Jefferson City*	*65102*
Main Phone Number	Main Fax Number	Website URL
573-751-3311	*573-751-1212*	*www.oa.mo.gov*
Department Director		
Jacquelyn D. White		
Number of FTE (entire department)	Approximate number of citizens served	
935	*5,000,000*	
Agency Mission (brief statement)		
The Division of Information Services' mission is to provide quality data processing and telecommunication services, resources and solutions to support state agencies so they can fulfill their missions for the citizens of Missouri.		

Department CIO and IT Division Profile (2004)			
Department Name			
Jill Hansen			
Department CIO Name			
Office of Administration			
Street Address		City	Zip
301 W. High Street		*Jefferson City*	*65101*
CIO Phone Number	CIO Fax Number	E-Mail Address	
573-751-3338	*573-751-3299*	*jill.hansen@oa.mo.gov*	
CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)			
Past ITAB chairperson, Vice Chair of Network Consortium			
IT Division Name		Website URL	
Division of Information Services		*www.oa.mo.gov*	
Number IT FTE (located in central office)		Number IT FTE (located in field)	
185		*MOTEC-3*	
Total $$ value of FY03 IT requests submitted to OA Budget and Planning		Total $$ value of FY03 IT requests funded	
Security Officer Name		Phone No.	E-mail
R.D. Porter		*573-522-8561*	*rd.porter@oa.mo.gov*
Privacy Officer Name		Phone No.	E-mail
ITAB Alternate Name		Phone No.	E-mail
Gail Wekenborg		*573-751-1504*	*gail.wekenborg@oa.mo.gov*
SDC Steering Committee Rep Name		Phone No.	E-mail
Jill Hansen		*573-751-3338*	*jill.hansen@oa.mo.gov*

Department Technology Profile (2004)	
Department Name	
Office Of Administration	
Main Processors (IBM ZOS with UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 2084 with zOS, UNIX,*
PC Servers	*NT, SQL, Windows 2000, Linux*
Mid-range	*AIX*
Networked	*Active Directory*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows NT & XP& 2000*
Dumb terminal	*3270*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dedicated and dial-up	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet and Socket	
Security Provisions (packages, anti-virus, filters)	
Network	*McAffee*
Desktop	*McAffee*
Internet	
Help Desk Packages (Magic, GWI)	
GWI, TRACKIT, Wicket +	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, IDMS, Oracle, SQL, DB2 UDB, Domino, Supra, IMS	
Development Tools (COBOL, CICS, Advantage: Gen, WebSphere, .NET, etc.)	
COBOL, CICS, All-Fusion, Focus, Cold Fusion, WebSphere	
E-Mail Packages (Exchange, Lotus Notes, etc.)	

Exchange, Notes
Encryption Packages (SSL, PGP, etc.)
SSL
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
ELIPS, SMPE
Telecommunications (T1, Frame Relay, etc.)
T1, Point to Point, fractional T, FRX, ATM
GIS (ArcView, MapInfo)

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Department of Agriculture

Accomplishments

New System Installation and Migration
This year the department began a major initiative to update existing resources to better position itself to serve the citizens of Missouri. The department is striving to move towards web-enabled processes that will allow citizens 24/7 access to the department functions such as licensing and permitting. This new system will include:

- Moving from the department's IBM AS/400 to Intel Servers running Windows Server 2003
- Migrating data from the IBM database to SQL Server 2000
- Migration of existing systems and programs from RPG to WebSphere
- Implementing Systems Management Server for installations
- Implementing network based backup and storage for all applications and users
- Migrating from Lotus Notes to Exchange in accordance with the state's Enterprise Architecture
- Installing a web server to house the department's new intranet
- Implementing ghost software to automate new PC setup

Data Standardization
In order to provide better service to the citizens of Missouri and to facilitate a single point of service for the department's licensing and permitting applications, a data consolidation and standardization effort has been initiated. This project will create a department data dictionary and identify data elements collected by the department regardless of source. Once completed, data will be centrally stored in a standardized database available to all divisions. Data will adhere to department and Missouri Adaptive Enterprise Architecture (MAEA) standards for naming, addressing and management.

Intranet
The department launched an intranet site for employees. This site is geared toward information distribution and knowledge transfer. The site provides all employees access

to department policies and procedures, management tools, events calendars, and project updates.

Geographic Information Systems (GIS)

The department was honored with an ESRI Special Achievement in GIS Award for work related to the department's homeland security initiatives. The department was one of only 153 organizations honored world wide in 2004. In support of the department's efforts, GIS is used in the emergency operations center and is available through an online mapping application that is updated in near real time during an event.

Continued enhancement of GIS for homeland security will include improving and increasing detail of existing data layers, providing more analysis and decision-making tools, and continuing to map critical infrastructure.

Security

For the first time in the department's history, anti-virus software was installed on every PC in the department. Because of increasing threats from the web and email, the department has taken steps to improve security measures to decrease the vulnerability to such attacks, and has strived to minimize the effect such an attack would have on daily functions.

Training

With the migration to WebSphere and the installation of a new system for the department, the IT staff is currently involved in more than 424 hours of training. In order to provide the service required of the staff, training has focused on the following disciplines:

Area of Focus	Hours
• Programming (JavaScript, XML, SQL)	176
• Security	88
• Web Design & Elements	40
• SQL Server	24
• Server Administration	8
• Networking	8
• Outlook	8

Application Development and Enhancement

New applications were developed to meet user needs and enhancements made to existing applications to offer more functionality. The highlights of these changes over the last year included the following:

- Animal Health Lab Billing Statements
- Brucellosis Ring Test System
- Carcass Show System
- License Printing

- Line Item Budgeting
- Missouri State Fair Systems
- Organic Certifications
- Pesticide Registration System
- Rendering Plant System
- Treated Timber Producers

Planned Projects

System Migration to WebSphere
Existing systems and programs currently developed in RPG will be re-designed and re-written in WebSphere. A migration plan is in development to guide the transition of system coding and will follow department priorities as directed.

Online Licensing Applications
In order to facilitate a single point of entry for citizens and to make their interaction with the department more user friendly, the department will be pursuing the ability to accept online licensing and permitting applications. With the migration to WebSphere and the installation of the new system, the department will be able to provide a stronger web presence while providing the citizen with a user friendly and robust application.

Web Posting Automation
In order to deliver web content in a timely manner to the citizens of Missouri, the department will explore the use of automation software for content posting. Current protocol dictates that posting for press releases and employment announcements must filter through the IT helpdesk. By placing the ability to post routine communications in the hands of the public information office and human resources, the delivery time of critical information to the public will be increased dramatically.

Helpdesk Software
One of the key hurdles faced in the IT section is the use of the help desk and the appropriate routing of calls. The department is currently using self-written system based in Lotus Notes. With the migration to Exchange and the need for more robust call routing and follow-up, off-the-shelf solutions will be pursued to replace the current help desk. The IT section will also work on compiling a self-help solution to ease the burden on the help desk operators while freeing their time to close open tickets that require more advanced help.

Accumulated Demand

The department help desk currently shows 46 open requests for assistance dating back to June of 2004. Many of these requests remain open because the scope is larger than can

be handled at this time. Projects remain on the help desk until assigned to an IT individual for completion.

Currently the largest focus for requests and projects is related to programming. Because the department only has two programming staff and 60% of their time has been devoted to maintenance on existing programs, new development has suffered. With the installation of the new system and migration to WebSphere, we have been able to reassign duties and provide training to an existing staff member thus increasing programming skills and productivity. Additionally, all new development on projects in RPG has been placed on hold until the section is positioned to proceed with WebSphere development.

The migration of existing systems and the development of new code are expected to cover a five year time span. The IT section is continually looking for ways to increase productivity and boost performance by increasing training for existing staff and through the acquisition of additional personnel where appropriate.

General Department Profile (2004)

Department Name		
Missouri Department of Agriculture		

Street Address	City	Zip
1616 Missouri Blvd	*Jefferson City, MO*	*65102-0630*

Main Phone Number	Main Fax Number	Website URL
573-751-4211	*573-751-5002*	*http://www.mda.mo.gov*

Department Director
Peter Hofherr

Number of FTE (entire department)	Approximate number of citizens served
444.85	*All citizens of the State of Missouri*

Agency Mission (brief statement)
"To serve, promote, and protect the agricultural producers, processors, and consumers of Missouri's food, fuel, and fiber products."

Department CIO and IT Division Profile (2004)

Department Name
Missouri Department of Agriculture

Department CIO Name
Ryan Lanclos

Street Address	City	Zip
1616 Missouri Blvd	*Jefferson City, MO*	*65102-0630*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-5518	*573-526-0530*	*Ryan.Lanclos@mda.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Missouri GIS Advisory Committee – Education and Outreach Chair; MidAmerica GIS Consortium – Steering Committee

IT Division Name	Website URL
Information Technology	*http://www.mda.mo.gov/*

Number IT FTE (located in central office)	Number IT FTE (located in field)
10	*0*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Ryan Lanclos	*573-751-5518*	*Ryan.Lanclos@mda.mo.gov*

Privacy Officer Name	Phone No.	E-mail
None		

ITAB Alternate Name	Phone No.	E-mail
Kevin Engelbrecht	*573-526-8168*	*Kevin.Engelbrecht@mda.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail
Ryan Lanclos	*573-751-5518*	*Ryan.Lanclos@mda.mo.gov*

Department Technology Profile (2004)

Department Name	
Missouri Department of Agriculture	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Windows Server 2003; Windows Server 2000*
Mid-range	*AS/400*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP; Linux*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA, IPX	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Cisco PIX firewall, Symantec AV*
Desktop	*Symantec AV*
Internet	
Help Desk Packages (Magic, GWI)	
Lotus Notes self written programs	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB 400; SQL Server	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
RPG; WebSphere	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes; Exchange	
Encryption Packages (SSL, PGP, etc.)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

None
Telecommunications (T1, Frame Relay, etc.)
T-1; Dedicated 56K
GIS (ArcView, MapInfo)
ArcGIS – ArcInfo; ArcIMS; ArcGIS Extensions (3D Analyst, Spatial Analyst, Publisher)

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Department of Conservation

Accomplishments

Network Operations
- Installed 32 servers department wide.
- Installed 3 new local area networks (LAN); Columbia Bottom, Puxico, and El Dorado Springs.
- Upgraded 15 local area networks and completed change over from Token Ring to Ethernet topology.
- Supported over 1,555 PCs, 39 LANs and 38 WAN locations across the state.
- Supported 1,550 e-mail users across four post offices statewide.
- Maintained an average 98.9% network availability throughout the year.

Desktop Support
- Replaced 453 PCs with new Windows 2000 computers.
- Completed 5,076 maintenance trouble tickets on PCs across the state.
- Prepared 653 purchase orders and processed invoices worth $2,053,111 in new computer hardware and software.

Help Desk
- Processed 13,075 trouble calls through the Help Desk.

Application Development
- Developed one new web application to support Forest Fire Tracking. Made major updates to the Raptor web application to support Expenditures and Accomplishments. Maintained and supported a total of 9 web applications on the Intranet.
- Developed 4 new Access applications to support License Plate Receipts, Forest Crop Land, Fiscal Interface to the Lands Database, and PILT interface to the Lands Database. Made major updates to the Hunter Method Exemption application. Maintained and supported a total of 30 Access applications.

- Developed 2 new Interactive Voice Response (IVR) applications to support Spring Turkey Check and the Deer Managed Hunt. Maintained and supported a total of 7 IVR applications.
- Maintained and supported 14 Visual Basic (VB) applications.
- Replaced 2 Clipper applications with new Windows/Web based applications. Maintained and supported the remaining 12 Clipper applications.
- Developed and supported 20 Access query and reporting databases to provide ad hoc reporting from MDC application data.
- Supported installation, customization, and operation of the HRIS, QuickSell, and Fleetwave commercial software packages.
- Maintained and supported 6 production databases in Oracle containing a total of 4667 tables and occupying approximately 66 gigabytes of disk space.
- Provided technical assistance, formatting, and posting of 15,545 pages on the MDC Intranet including HTML pages, Active Server pages, and PDF pages.

Technology Training
- Supported a total of 424 student trainings for MDC employees.

Voice Communications
- Replaced six telephone key systems: Columbia Regional, Rolla, Kirksville, Dalton Range, Neosho and Chillicothe.
- Maintained over 1,600 telephones, 1 PBX System, 67 Electronic Key Systems, numerous FAX machines, and audio visual and public address equipment at 117 locations across Missouri.
- Issued 67 purchase orders for telephone equipment and facsimile machines, and 70 service orders for voice and wide area network services.

Wireless Communications
- Replaced 282 mobile radios, 65 portable radios, and 2 base stations throughout the state.
- Replaced 58 fixed repeaters in the Northwest, Central and Kansas City regions. This equipment replacement is resulting in improved mobile and portable radio coverage in areas served by the tower sites.
- Installed seven new (ADD) fixed repeaters in the Central, Kansas City, Southwest, and Ozark regions. These were necessary to provide radio coverage for the "Fire Zone" dispatching system for Forestry Division.
- Issued 4 requests for frequency coordination for new FCC radio station licenses, and 28 requests for license modifications.
- Constructed new base station towers at Kansas City and Columbia regional office and erected a new repeater site at Indian Hills Conservation Area.
- Issued 270 purchase orders for radio equipment, service parts and tower maintenance.
- Acquired 6 equipment shelters for radio tower sites. These were installed at Powell, Meta, Gipsy, Taum Sauk, High Pointe and Blue Slip.
- We now maintain 89 tower sites, 98 base stations, 180 radio relays, 1,243 mobile radios and 1,078 portable radios.

Planned Projects

- Desktop Management Suite – implement desktop management software to allow remote software installation, software/hardware inventory, and operating system patches to be installed without technicians having to visit each machine.
- Telephone Systems – update telephone communications by replacing telephone systems at 7 offices.
- Radio Systems – update radio communications by replacement of 40 base stations, 400 mobiles, 170 portables and 34 repeaters.
- Computer Systems – update computer systems by replacing 111 laptops and 405 desktops, 4 workstations and 19 servers.
- Network Security – acquire and install a PC based firewall solution to protect agency laptops when connecting to the Internet and outside of MDC facilities.
- Maintenance Costs – Review maintenance contracts to determine ROI and investigate reducing costs by internalizing maintenance where appropriate.
- Infrastructure Changes – incorporate Design and Development computer systems into the Central Office system. Evaluate needs and reduce overall number of servers through attrition.
- Developing software applications approved by Division Administrators in the FY 05 Technology Budget Review including Voice Telecheck for Deer, Land Tracking System, Hatchery Management, Payment in Lieu of Taxes, Ag Crop Reporting, ASP style sheets for web content publication.

Accumulated Demand

- Continue upgrading of PC operating systems related to security concerns and bug fixes. Move all PCs to minimum platform of Windows 2000 and acquire Windows XP as computers are replaced.
- Convert all radios in the system from wideband to narrow band channel use, implement digital tone coded squelch control, and program new law enforcement and fire service interoperability frequencies statewide.
- Data communication with remote offices where dial-up telecommunication facilities cannot provide needed quality or bandwidth.
- Demand continues for application development projects to satisfy resource and business needs of the agency. Future programming efforts are primarily web based applications utilizing a set of style sheets to provide a common look and feel to all agency applications.
- Demand continues for a cost-effective approach to connect remote users to state systems and information. Due to the remote location of many agency employees data service is slow over voice grade connections.

General Department Profile (2004)

Department Name		
Missouri Department of Conservation		

Street Address	City	Zip
2901 W. Truman Blvd *P. O. Box 180*	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751--4115	*573-751-4467*	www.conservation.mo.gov

Department Director
John Hoskins

Number of FTE (entire department)	Approximate number of citizens served
1500	*6,000,000*

Agency Mission (brief statement)
To protect and manage the fish, forest, and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy, and learn about fish, forest, and wildlife resources.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Department of Conservation		
Department CIO Name		
Douglas Young		

Street Address	City	Zip
230 Commerce Drive, Suite 201	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-522-4115 (x3112)	*573-751-4865*	*Doug.Young@mdc.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
Conservation Business Managers Association (CBMA)	

IT Division Name	Website URL
Information Technology	

Number IT FTE (located in central office)	Number IT FTE (located in field)
35	*12*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$0	*$2,354,228 (IT Internal Budget)* *$2,719,391 (Dept Technology Budget)*

Security Officer Name	Phone No.	E-mail
Jim Garr	*X3580*	*Jim.Garr@mdc.mo.gov*
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Jim Lundsted	*X3270*	*Jim.Lundsted@mdc.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
Missouri Department of Conservation	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Intel Pentium with Windows NT Server /Windows 2000/Netware 5.1*
Mid-range	*AS/400 with OS/400*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000, Windows NT*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Frame Relay & RAS Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Pix Firewall, Cisco Intrusion Detection, Norton AV, MIMEsweeper, PornSweeper, Sophos*
Desktop	*Norton AV*
Internet	*Websense*
Help Desk Packages (Magic, GWI)	
Magic Service Desk	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, Oracle, SQL Server	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
COBOL, Visual Basic, Visual InterDev, Microsoft Access	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Novell GroupWise	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Source Safe
Telecommunications (T1, Frame Relay, etc.)
Frame Relay
GIS (ArcView, MapInfo)
ArcView, ArcInfo, ArcIMS

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Accomplishments

Information Systems Infrastructure

In 1999 an Information Systems Infrastructure Review and a subsequent DOC Architecture Review were conducted that resulted in a number of recommendations. These included:

- Replacement of obsolete network and workstation technology

- Upgrade of data network wiring

- Implementation of data warehouse and user query capabilities

- Replacement/upgrades of legacy applications focusing on implementation of workflow and advanced application technologies

- Upgrade of existing AS/400 computing platforms

Because of the state's budget challenges over the past several years, the department has been unable to obtain the additional funding needed to address these recommendations. However the department has been able to accomplish several of the recommendations with core funding and continues to make progress implementing the others. Considerable progress has been made on three of the five recommendations.

The concept of a data warehouse is being implemented within the department. The necessary hardware and software resources have been acquired and installed. Extracts of data from certain computer systems are routinely pushed to the warehouse where selected department users have the capability to query it for a variety of business purposes. Business areas supported by the warehouse now include offender grievances, offender visitation and adult institution management reporting.

In 2004 a new oversight function was implemented to ensure the limited technology resources are used in the most effective and efficient methods. As a result of this organizational change, significant information system resources were able to be redirected from some maintenance projects to newer initiatives a full year earlier than originally anticipated. Consideration for productivity, including the benefits of workflow

and the cost effective use of advanced technologies, are now given consideration on every information technology project including maintenance and enhancements before priorities are established and resource allocation decisions made.

During 2004 a follow-up review of the AS/400 technology used by the department was conducted by a third-party vendor. As in 2000, this review validated the use and viability of the computing platforms being used by the department and planned for the next several years.

Because of the funding shortage progress towards the recommendations addressing obsolete network and workstation technologies and wiring was not substantial in 2004. However, the department was able to make some progress by ensuring that this infrastructure need is formally incorporated as a part of other activities whenever possible. As a result, current technology and wiring was installed in a number of functional areas during the year. It is widely recognized within the department that the obsolete technical infrastructure continues to pose significant risk to its operations and to the well being of its employees and the offenders it supervises. It is also recognized that continuing postponement of allocation of the required resources will increase this risk and significantly increase the overall cost of mitigation. As with previous years, the budget outlook prohibited the department from submitting funding requests for FY06. The department intends to aggressively pursue resources in the FY07 budgeting cycle to accomplish this objective.

Computer Applications

During 2004 numerous enhancements were made to the department's offender management system (OPII). These additions were made at the direction of a user steering group, the Technology Steering Committee, which meets on a regular basis to review, approve and give direction regarding all Information Systems development projects and technology initiatives. Enhancements to the offender management system include the completion of incorporation of offender images into the electronic offender record, the automated calculation of salient factor variables and guideline dates, the incorporation of board decision information, and the inclusion of criminal behavior summary information to support comprehensive offender assessments for better decision making.

A large number of user-requested enhancements to the Medical Assessment and Reporting System (MARS) that were begun in 2003 were implemented in 2004. Design of the second phase of MARS enhancements, intended to improve the accuracy and availability of this information and the integration with OPII, has begun but will not be implemented until mid 2005.

New applications that were completed and implemented during 2004 include the following:

Image Processing

In 2003 the department implemented the Offender Image Management (OIM) System. In 2004 the phase consisting of the expansion of image collection capability to Probation

and Parole field offices and the creation of online transactions to produce Absconder Face Sheets for field supervision staff was completed. Currently there are 14,858 photos of incarcerated offenders (one half) and 16,243 photos of field supervised offenders (20%) stored in the system.

Salient Factor Analysis and Design

The construction and implementation of the Salient Factor system was completed in 2004. This system records offender criminal behavior results and using OPII data, will afford the department the ability to accurately determine salient factor scores, guideline dates and range determinations from existing OPII data without the need for manual calculation. Because of the requirement to run across department boundaries, this system was implemented in both 'green screen' and browser-based versions. All data resides in the central OPII data repository.

Criminal Behavior Research Summary

Construction and testing of the Criminal Behavior Research Summary project was completed in 2004. Implementation is scheduled for the end of the year. This project is related to the Salient Factor system in that it is intended to record local, out-of-state and federal criminal behavior research information as it directly relates to the salient factor scoring process.

Toxicology Lab System

The completion of interface between the department's toxicology laboratory and other offender-related information in OPII was completed in 2004. This project had started in 2003. The laboratory had identified the need to expand access to drug and alcohol testing information and to incorporate results of such testing into the Central Offender Data Repository. This increased the department's ability to perform effective analysis and reporting functions. The project resulted in automated interfaces between the central system (OPII) and the Toxicology Lab testing system located at the Cremer Therapeutic Community Center. It also enabled direct entry into OPII of test results that are conducted by Probation and Parole officers in the field.

JCCC Opening

In anticipation of the opening of the new JCCC institution, it became necessary to formally rename the older JCCC to the Missouri State Penitentiary (MSP). This rename required extensive changes to a number of computer systems within the department and most of these were accomplished in 2003. Because the offender management system is designed to permit the opening and closing of institutions, the 2004 transition from MSP to the new JCCC required minimal Information Systems support and effort.

To support the transition to the new institution it was necessary for Information Systems staff to create new user IDs for all JCCC staff in order for these users to transfer offenders using normal system functions from the old institution to the new and assign housing to them. Once this transfer was complete, system transactions were used to close out the MSP institution in OPII, keeping all records relating to that institution for historical purposes.

Progress made on other application development projects during 2004 also included the following:

- Design phase of the Probation and Parole Automated Roadbook will complete in February 2005. This project will replace the need for field officers to maintain manual records in the road book and greatly improve the availability of this information to other field staff making decisions regarding the supervision and treatment of the offender. The application will interface with OPII and allow automated information to be taken with or collected by the officer when in the field.

- Phase II of MARS, including development of standard diagnostic and treatment codes, enhanced SOAP notes, and a medical lay-in interface with OPII is underway.

- Construction of the electronic interface between OPII and the Highway Patrol Criminal History system is underway and will be completed by mid 2005. The Analysis of the interface requirements has been completed and this application will alleviate the need for DOC and Highway Patrol staff to transfer and manually enter statutorily required information into the repository. Completion will also result in the much more timely entry of criminal history information coming from DOC into the criminal records database.

- Changes to OPII, in support of the new statute requiring expanded DNA testing, will be implemented by the end of 2004. Along with the changes necessary to identify offenders and support the testing of all the new offense codes, the system has been enhanced to permit Highway Patrol staff to enter or update information directly into the OPII offender database.

- Major changes to Probation and Parole sentencing reports, driven by Sentencing Commission direction, will be implemented in pilot sites by year end. In support of this improved reporting, the OPII system has been enhanced to utilize a scoring tool to assess an offender's risk and guide officers in their recommendations to the courts. Statewide implementation is scheduled for March 2005.

- Analysis and design phase of an enhanced offender conduct violation system started in 2004 and will be completed in early 2005. An internal department work group addressing opportunities to improve this business process resulted in extensive changes to the process and information it requires. The supporting component of OPII is being changed to support the redefinition of conduct rules, violations and sanctions and to enable historical data to be retained. Implementation of these changes is planned for March.

- A large number of changes dictated by revised department policy were made to the offender classification functions of OPII.

- Implementation of a web-based version of the Victims Notification System (VINES) was completed.

- The Visitation Management system was improved with additional edits, including searches, to determine if a visitor is using a different name but similar license, Social Security or other identification numbers to visit offenders across multiple institutions.

- New Common Code tables were implemented to facilitate migration from the J. D. Edwards proprietary CASE tool.

Network Support

A number of large network projects were completed in 2004.

The opening of the new JCCC institution required significant support. This included the installation of 218 workstations, 69 printers, the network resources and testing of vendor installed wiring required for connectivity. New video conferencing capability with the courts was also installed at the institution.

Using growth pool funding, the department was able to replace 1,848 obsolete Probation and Parole workstations in 62 locations. These workstations were between four and six years old and were unable to be upgraded to support the emerging business requirements of the customer. As a part of this project the department took the opportunity to provide Internet access and Outlook mail capability to more than 1,400 P&P users who did not already have it. This capability enables these users to access new internal applications such as offender image and contractor-provided offender management applications such as Electronic Monitoring and Minimum Supervision.

The department began the rollout of videoconferencing capabilities in most institutions that will enable court hearings to be conducted without removing the offender from secure confinement. By year end this capability had been implemented in eleven of the fourteen planned institutions with the remainder scheduled for January 2005. This project has resulted in significant savings in staff time and cost of offender transportation and improvements in public safety due to no longer having to remove the offender from the secure perimeter for court hearings.

Efforts to upgrade department servers to Windows 2003 continued this year, with 46 more servers brought to currency. At the time of this writing six servers remained to be upgraded out of the original 113.

Windows System Management Server (SMS) was upgraded on all 113 servers to release 2, service pack 5. This upgrade has significantly enhanced the department's ability to perform remote support on the network, alleviating much of the travel that was originally required for this support.

Approximately 1,400 new users of Microsoft Outlook and the Internet were added during 2004. Approximately 1,000 of these were in Probation and Parole and their upgrades

were accomplished during the workstation upgrade project. The remaining 400 were primarily located in institutions and these were addressed either as individual requests or as projects as the requirements were approved and prioritized. The expansion of these capabilities was driven primarily by the department's need to increase communications with other state agencies involved with the Transition from Prison to Community/Missouri Reentry Program efforts and the need for staff to communicate with vendors of contracted offender management services such as Electronic Monitoring and Minimum Supervision.

Demand on the department's help desk function, the Customer Support Center, continued to be high in 2004. There were 19,369 calls placed to the Support Center and 11,683 work orders issued. Sixteen percent of these work orders required onsite support at 90 remote locations for resolution. This percentage is a significant reduction from the previous year's number of sixty-five percent. This reduction was the product of an aggressive plan to install standard computing platforms and advance system support software such as SMS remote tools and the remote desktop feature of Windows XP. The department was also able to defer a large number of Probation and Parole work orders until their workstations were replaced.

Other major network support projects started in 2004 and complete or still underway include:

- Completion of 27 new non-maintenance projects large enough in size or complexity to require approval and prioritization of the Technology Steering Committee. These projects involved such activities as equipment installation or replacements (170), workstation and central system software installation and upgrades, addition of locations (21) to the network, rollout of expanded VPN capability, network reconfigurations, and other similar efforts.

- Reallocation of 38 networked workstations that were upgraded in administrative areas (central office personnel and budget and planning) to locations requiring them in institutions – 50% complete.

- Implementation of an automated function (Track-It software) to provide users with online access to the status of support center work orders – 90% complete.

- Consolidation of data circuits in thirteen institutional locations and increases in bandwidth in another twenty-three locations, resulting in reduced network costs and increased performance – 33% complete.

- Deployment of Microsoft Software Update Services (SUS) to centrally manage and distribute patches and other operating system updates to remote Windows clients – 75% complete.

- Develop, implement and test backup and disaster recovery strategy for the data warehouse server – 50% complete.

- Install third-party software (MB Software) for performance optimization on the central AS/400 computing platforms – 50% complete.

- Installation of version 5.2 of MQ Series that is necessary to support the Criminal History interface that is being developed with the Highway Patrol – 65% complete.

Planned Projects

In 2004 the Department of Corrections made a major change in how it reviews, approves and prioritizes the use of the limited technical resources afforded it. The establishment of the Technology Steering Committee (TSC) and formal supporting processes has enabled us to shift the majority of Information Systems resources from the maintenance of the technical infrastructure and existing applications to the development of new capabilities. This emphasis will continue in 2005.

Computer Applications

There have been a number of critical department business areas identified where technology support is required. Those that have been identified and approved by the TSC to be worked on in 2005 follow.

Application development projects approved and planned for 2005 include:

- Completion of the Automated Road Book component of the Probation and Parole Automated Case Management system.

- Completion of Phase 2 of the offender medical system (MARS) enhancements.

- Implementation of automated interfaces to the Electronic Monitoring Program (EMP) system required by the new vendor.

- Completion of enhancements to the OPII conduct violation function including automated form completion capabilities.

- Implementation of automated support for the MRP Transition Accountability Plan (TAP) currently being developed.

- Implementation of eight high priority enhancements to OPII that have been submitted by the OPII user group and reviewed and approved by the TSC.

- Implementation of fifteen high priority enhancements to OPII that were submitted by the Electronic Access to Information process improvement team and reviewed and approved by the TSC.

Missouri Re-entry Program (MRP)

One of the greatest challenges facing the Department of Corrections is the management of the large offender population, especially given the limited resources assigned to the department. There are currently several initiatives underway relating to population management that will result in significant changes to department business processes. We are already seeing requirements for Information Systems and Technology support emerge

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from these initiatives and anticipate that there will be extensive opportunities to support these with changes to existing or implementation of new computer systems in 2005 and beyond.

Currently these department initiatives include Transition from Prison to Community, Information Quality, External Communications, Electronic Access to Information, Board Returns, and Inmate Canteen.

Justice Integration (with the Highway Patrol and the State Courts)

In very late 2004 the department began construction of an automated interface between the department and the Criminal History repository located at the Highway Patrol. The construction of this interface is anticipated to be complete by mid year 2005. Federal funds have been made available to support this effort.

In 2003 the State's Justice Integration Task Force completed an analysis of the information sharing needs between the criminal justice agencies across the state. The primary exchange points for the Department of Corrections were the Highway Patrol (criminal history information) and the Courts. The analysis of the business requirements for information exchange between the department and State Courts began in late 2004 and will be completed by mid-2005. The programming resources currently implementing the Criminal Repository interface will be redirected to the design and construction of the Courts interface at that time.

Data Warehouse

In 2005 data warehouse efforts will focus on implementation of the concept for the Offender Management (OPII) system, with a focus on Probation and Parole Central Office information needs and SAM II HR reporting. SAM II efforts will include requirements necessary to transition our warehouse reports to the SAM III system with minimal impact on department users. We also plan to continue the extension of access to existing warehouse resources to additional department customers.

Network Support

A number of activities relating to the data network have already been identified and approved by the TSC as 2005 projects. These include the following:

- Installation of encryption capability on approximately 700 workstations and a large number of printers that require access to the MULES system. This project will require that most of the 319 MULES devices located in our institutions be replaced by personal computer workstations.

- Expansion of MULES access to an additional 500 P&P users requiring it for the Criminal Behavior Research system.

- Relocation of approximately one dozen Probation and Parole offices and 200 to 300 workstations.

- Continued deployment of MS Outlook mail and Internet capability to Adult Institution staff and replacement or upgrading of associated workstations.

- Continue the upgrade of obsolete Adult Institution workstations and migration to Windows XP.

- Continue the upgrade of data wiring and workstations in Adult Institutions.

- Complete the wireless LAN pilot project.

- Development of a plan and implementation of software auditing capabilities on approximately 3,300 department network-connected workstations.

In addition to the projects above, the department expects to spend considerable time and resources on the continuing replacement of obsolete workstation and network technology within the department. Because we have been unsuccessful in obtaining specific funding to upgrade our obsolete and high-risk data networks, we are attempting to address this problem by insuring that the technology replacement possibilities are evaluated for every approved project and whenever possible include that objective as a part of the project. This approach is addressing the problem in a very slow manner, but progress is being made.

Because essential network equipment is very outdated and most located in our Adult Institutions is no longer capable of supporting current software and hardware technologies, this issue remains one of the department's greatest risks to our continued operations. As the result of our inability to receive funding and address the issue in a timely manner, we are forced to accomplish this migration in a less organized fashion at higher cost and risk. Our operational strategy will continue to focus on minimizing these costs and associated risks while accomplishing pieces of the task as opportunities present themselves.

Accumulated Demand

Significant backlogs of accumulated demand exist in all functional areas within the Office of Information Systems.

Applications Development

In applications development there are seven major new projects that have been placed on hold by the Technology Steering Committee (TSC). Many more requests have been received, but the TSC has placed review and approval of these on hold for the time being. There remain over 400 user-requested enhancements to the Offender Management system (OPII). These enhancements represent requests that have been approved and prioritized by the user committee, but put on hold by the Technology Steering Committee. With current staffing levels and maintaining our commitment to currently approved projects only, these OPII requests represent over four years of backlogged work.

Aside from the above, there remain forty-one business systems identified in the department's Information Strategy Plan. All of these represent potential candidates for

new computer applications. Assuming that staff shortages are not alleviated, we anticipate little progress in the development of new computer applications to support these business areas.

Network Support

There are seven approved major infrastructure projects that have been placed on hold by the Technology Steering Committee. As with the department's application development projects, the TSC has placed a temporary hold on the review and approval of a large number of new requests. At the time of this writing there are approximately 200 backlogged service requests in the support center. The current backlog represents several months of work. This is a significant reduction from the 2003 average of 350. However, we believe that the impact of replacement of Probation and Parole workstations has had a very positive impact on this workload, resulting in this dramatic reduction. As the use of these workstations becomes more sophisticated with the increased integration with other state and private computer systems, we believe the requirement to install and support more complex software will result in the workload in this area increasing to a level close to what it has been in the past. Of the support requests received, approximately 16% require onsite support. This is a reduction from the 65% requirement from a year ago, but since a very large number of outstanding service requests were addressed with the P&P replacement, we do not anticipate this number remaining this low for very long.

User Training

Because of increased involvement by trainers in the application development process, including training on and support of new systems, less of their time is available for other user training. Limited progress was made in addressing the department's application training requirements during 2004, but there remains a significant backlog in training of users on department computer applications. The offender management system continues to have a four-year backlog for staff training. Approximately 85% of the 11,000 system users of OPII have not received required refresher training. Other new applications will impact the training requirement. We estimate that there exists another 8,000 staff with lower priority training needs. We cannot estimate a realistic timeframe for these users and assume training will occur over the next three to five year period. None of these estimates include additional training requirements that will come up as the result of staff turnover and implementation of changed and new applications.

General Department Profile (2004)

Department Name
Missouri Department of Corrections

Street Address	City	Zip
2729 Plaza Dr	*Jefferson City, MO*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-526-6502	*573-751-4099*	*www.doc.missouri.gov*

Department Director
Gary B. Kempker

Number of FTE (entire department)	Approximate number of citizens served
11,200	*5,595,211 (entire state population)*

Agency Mission (brief statement)
The DOC with victims, communities and state and local governments improves public safety through secure confinement and effective community interventions. Through our cooperative efforts to provide effective correctional services, we hold offenders accountable for their behavior and prepare them to be productive citizens.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Department of Corrections		
Department CIO Name		
David L. Schulte		

Street Address	City	Zip
2729 Plaza Dr.	*Jefferson City, MO*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-6452	*573-522-2274*	*dave.schulte@doc.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Corrections Technology Association

IT Division Name	Website URL
Office of Information Systems	*N/A*

Number IT FTE (located in central office)	Number IT FTE (located in field)
41	*13*

Total $$ value of FY05 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$ 6,293,767	*$ 6,285,612*

Security Officer Name	Phone No.	E-mail
N/A		
Privacy Officer Name	Phone No.	E-mail
N/A		
ITAB Alternate Name	Phone No.	E-mail
R.P.Campbell	*573-526-6614*	*press.campbell@doc.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail
N/A		

Department Technology Profile (2004)

Department Name	
Missouri Department of Corrections	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*N/A*
PC Servers	*Win2003*
Mid-range	*AS/400*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*WinNT and WinXP*
Dumb terminal	*5250 and thin clients (networked workstations)*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP and SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
WAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Symantec Norton Antivirus and Antigen*
Desktop	*Symantec Norton Antivirus*
Internet	*Pix Firewall, Cisco IDS, MS ISA, Websense*
Help Desk Packages (Magic, GWI)	
Track-it	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2/400	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Native RPG, Cool:Biz, Cool:Plex	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
MS Exchange and Outlook (on clients) with Sybari Antigen and Spam manager	
Encryption Packages (SSL, PGP, etc.)	
N/A	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

N/A
Telecommunications (T1, Frame Relay, etc.)
T1, Frame Relay and some point-to-point circuits
GIS (ArcView, MapInfo)
N/A

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Department of Economic Development

Accomplishments

Workforce Consolidation

In 2003 Governor Holden signed Executive Order 03-04 transferring the employment and training functions of Temporary Assistance for Needy Families (TANF and Parents Fair Share (PFS) and continuing contractual arrangement to serve Food Stamp recipients in the Missouri Employment and Training Program (METP) to the Division or Workforce Development.

Much of the work for this project was completed in 2003; however, many system refinements, enhancements and additional interdepartmental interfaces were undertaken in 2004. This effort resulted in the additional services to constituents and additional case management features for state staff and business partners.

Great Hires – Missouri's Workforce Resource

A new system for providing job services was implemented in 2004. The Department of Economic Development sponsors and maintains the Great Hires website that provides job services through alliances with agencies/organizations focused on improving quality of life for all Missourians.

The Great Hires application is a publicly available, internet-accessible application that was engineered to provide more complete services by providing a better job-matching component. The following resources are now provided through Great Hires.

- **Job Seekers:** Access to thousands of Missouri jobs, with job matches based on skills as well as job titles; job market search feature to find openings by title, skill set, field of study, or zip code; personal homepage to store searches, position descriptions, and communication with businesses; on-line Unemployment Insurance Claim Reporting (available in Missouri Career Centers).

- **Businesses:** No-cost access to Missouri's largest hiring pool and broadest variety of skill sets; streamlined five-step job posting process, with increased control over

your ability to ensure qualified matches; ranking of candidates for more precise match to business needs; individual home page with consolidated list of all job postings, searches, and communication

Missouri Arts Council

Projects are currently underway to rewrite the Missouri Arts Council (MAC) grant tracking system and to revise their web presence. The grant tracking system is used to administer MAC grants that are given to the Art Council's constituents. It provides account information and the necessary reporting that is required to manage the grants. This system will be integrated with the other applications that manage the department's financial products. A new, enhanced website is also under consideration.

Hispanic Commission Web Site

In support of Executive Order 03-24, the Governor's Commission on Hispanic Affairs tasked the Department of Economic Development with developing and hosting a website that provides information for the Hispanic community of Missouri. This website contains information regarding the Commission as well as other events and resources of interest to the Hispanic community.

Missouri Community Service Commission Web Site

The Missouri Community Service Commission website was redesigned to represent more current information about the commission. The site includes a calendar of events and the newsletter.

Bid Proposal Web Site

The Department implemented a new website that allows the public to access bid opportunities. These postings provide specifications for goods and services that the department is interested in procuring.

Business Development and Trade Web Site

The Business Development and Trade Division is in the process of developing a new website to promote the division's business functions. The website is targeted towards potential investors seeking business location services and information and investors seeking business services. An area of the web site has been architected specifically to address the needs of economic developers.

The customer experience with visiting the website is intuitive and provides integration to existing websites such as the Missouri Film Commission, Missouri Location One and Missouri Economic Research Information Center (MERIC).

Administrative Improvements

MIS reviewed our current application development methodology and began looking at industry trends and best practices in order to enhance our application development life cycle. An emphasis on training was placed on project management and business process analysis. The objective is to provide more effective business solutions.

MIS also published new policies and procedures that are intended to promote the consistent implementation of technology solutions. The policies and procedures provide direction to the users of technology and help to communicate departmental direction on IT solutions. MIS also implemented a steering committee to help improve communication with divisions and to assist with discussing and implementing new IT strategies.

Help Desk Implementation

The implementation of a new Help Desk system was completed during the year. This new system will allow MIS to collect and track metrics about the various projects, products and services that MIS provides. The system will result in faster turn around time for issues. It will also allow us to track the number and types of services so that resources can be more appropriately managed.

Network Projects

The department implemented several improvements that increased network efficiencies and security. These improvements included a new firewall design and the implementation of new firewall rules aimed at mitigating undesirable network traffic. In addition, projects were started that allow us to more effectively monitor and log network traffic.

E-Mail System Enhancements

The department completed several improvements to its e-mail system. Network mail users had been operating using two different mail products. All mail users have been converted to a single product. This allowed a consolidation of mail servers, reducing the amount of administrative overhead required to manage the mail system. It also provided users with collaborative functions such as calendaring as well as other personal productivity features. Improvements were also made in controlling spam and unifying the mail egress points. The department also completed the conversion to the new statewide e-mail naming standard.

Server Consolidation

MIS continued the process of reviewing the server infrastructure used throughout the department. This review resulted in the consolidation of several servers and a more manageable server environment.

Department Intranet Website

The department implemented a new Intranet website for department staff. The new Intranet is a primary method of communication for staff. The new site contains announcements, calendaring features, links to policies and procedures, employee productivity tools and many other employee interest features. It incorporates security features that allow groups to be set up to collaborate on projects and share information among appropriate users.

Web Reporting Tools

MIS implemented the use of a query and reporting engine that lets users have Web browser access to more department information. The product provides optional enhancements for report scheduling and distribution. A key feature of the product is the capability for multidimensional data. integration of reports into web applications.

Performance Metrics

MIS instituted the use of a new set of performance measures and reevaluated the metrics needed to track and manage performance. Each section of the division developed an appropriate set of measures and automated processes were developed to collect and report on activities. The measures are used to evaluate the division's productivity and efficiency.

Internet Website

The Missouri Division of Professional Registration has completed the redesign of its Internet website. This website serves as a central repository for vital information for all the boards as well as the Division. Included in the redesign of the site was the implementation of a new licensee searchable database that reduced average search times to less than one second. The redesigned site also implemented standards for how all board-related information is presented to and viewed by site visitors. Along with the redesign the site was also updated to allow it to serve as the portal into online renewals for licensees of the boards here at the Division.

Internet E-mail Addresses Updated

The Missouri Division of Professional Registration has completed the updating of all its Internet-based e-mail addresses to the new statewide standard. Along with the changes to Internet e-mail addresses, all corresponding web pages were updated to reflect the new addresses. The e-mail changes were also coordinated with all printed publications and materials as well.

Client Content Management for Internet/Public Notice Meeting System

Along with the redesigned website for the Missouri Division of Professional Registration, client content management was introduced for the boards at the Division. Client content management allows all the boards at the Division to have the resources to manage their specific content on the Division's website. By taking advantage of the standards introduced during the Division's website redesign, the content management provides the means for board staff, not information technology staff, to be responsible for when their content is placed on and removed from the Division's website. Using existing technologies allowed content management to be introduced and used without any major expenditure.

The same content management that was used by the boards for the Division's website is also used to manage the content displayed on the electronic meeting notice system. This system is used to meet the requirements for posting meeting notices for the boards. By using a single content management system, updates are done simultaneously to both the

Division's website as well as the electronic meeting notice system. By doing so, there are no double entries or postings since a single posting will update both the website and the meeting notice system.

Content management has reduced information technology staff involvement with content specific postings. Information technology staff are now responsible for maintaining the content management system and not directly responsible for posting board specific content. The boards have reduced the time to do a posting to zero since they are now responsible for their own content postings. This has also allowed information technology staff to focus on other projects since they are no longer doing this type of maintenance work.

HB 600 Data Sharing and Compliance
With the passage of HB 600, the Missouri Division of Professional Registration has implemented procedures and processes to interact and share data with the Department of Revenue. These processes allow for cleansing the data that is shared so that inaccuracies and problems with bad address information are kept to a minimum. In conjunction with the Division's licensee renewal cycles, data is passed to the Department of Revenue. The procedures and processes are continually being improved to automate the data sharing and to reduce the timeframes related to this project.

Improved Off-site Employee Help Desk Process
Recognizing the unique needs of off-site staff and the computer support they require, the Division of Professional Registration has implemented an improved process for serving the off-site staff. Utilizing existing tools and equipment, a dedicated phone number was assigned to the off-site field staff to report help desk related issues. Any given call can be routed through all the Division's staff so that the off-site staff person will most likely make contact with a person and not voice mail. The goal of the improved process is to have first contact/call resolution 90% of the time. Since implementation that goal has been met by the improved process. Off-site staff may still e-mail the help desk for issues that are not time sensitive or work prohibitive. The improved process also eliminated call backs as well as multiple calls to resolve a single issue.

Integrated Fax Services into e-mail clients
The Missouri Division of Professional Registration has installed fax-related services that are fully integrated with the Division's e-mail client software in order to facilitate direct faxing from staff computers. The integrated fax service allows staff to use existing software for faxing. The system also reduces the time spent printing and faxing documents that are originally in digital format. Dependence on multiple hardware fax solutions has been reduced by 25% to date. Staff are capable of both sending and receiving faxes from their existing e-mail client software with no additional configuration work. Optical Character Recognition (OCR) is used when routing inbound faxes to the appropriate staff.

Electronic Timekeeping System Updated
The Missouri Division of Professional Registration has updated the existing electronic

timekeeping system to allow for the capture and reporting of staff hours associated with inspection and investigative work. This update helps to assist Division staff with determining the actual costs to perform inspections and investigations. The electronic timekeeping system is web based and is hosted via the Division's Intranet site.

Department of Economic Development Leave Share Online Auction
The Department of Economic Development Leave Share annual auction was hosted online for the second year using services and web applications provided by the Missouri Division of Professional Registration. Approximately 160 hours of staff time were saved by moving this annual auction for the Leave Share group from a paper-based, manual system to an automated, web enabled online auction.

Optical Imaging System Upgrade
The optical imaging system software for the Division has been successfully upgraded during the past fiscal year. The upgrade was done to improve the stability of the existing system as well as provide staff with newer tools to use with the existing system. The optical imaging system is being used to store 4,157,000 images to date. As a benefit, many of the boards have been able to reduce their onsite and offsite paper storage needs.

Online Renewals Pilot
Online renewals at the Missouri Division of Professional Registration continued through the process of testing and implementation. Licensed professional counselors were selected to be a pilot board for the online renewals project. During the normal renewal period for licensed professional counselors, which in this case was April 1 - June 30, 2004, 21.43% of the renewals were done online using the new system. As a result of this pilot project changes were then implement to the system with anticipation of full release of online renewals starting the beginning of fiscal year 2005 for all the boards at the Division.

Automated Board Agendas - Full Implementation
The Missouri Division of Professional Registration has fully expanded this system to all the boards in the Division. The system is used to produce board agendas and related documents in digital format instead of on paper. This allows the boards to fully archive in searchable formats their board meetings. The agendas are capable of being produced via the optical imaging system as well as from other sources. This allows the boards to produce a single compact disc for each board member instead of an immense paper agenda.

Most boards are realizing a cost savings of 25-67% with the automated agendas in comparison to producing paper-based agendas. This has also allowed the board to retain previous agendas as well as search much larger volumes of information when attempting to make decisions on board related issues.

Information Sharing With Other Departments
Due to the passing of House Bill 600 and other information sharing efforts, the Missouri Division of Professional Registration has developed and implemented information

sharing with multiple other departments within the State of Missouri. Information is currently being shared routinely with six other departments as well as multiple divisions within those departments. This information sharing work specifically identifies the needs of these other departments and gives them only the information they require as opposed to just raw data on professionals. Processes are in place to share this information on regularly scheduled intervals.

Public Service Commission (PSC) Helpdesk

Helpdesk supports over 200 staff, over 5 million ratepayers, 1,000+ utility companies and many intervenors that do business on their behalf. Level 1 helpdesk requests are handled by helpdesk technicians and do not require special assistance from other specialist (e.g., network or development).

There were 6,412 helpdesk tickets generated and Level 1 helpdesk requests had an average resolution time of approximately four hours. Time is calculated from the time the ticket is generated until the matter is resolved or otherwise closed. Using the Helpdesk Summary Report, a few of the highest categories were:

- EFIS Data Correction with 693 requests,
- Printing Issues with 614 requests,
- Hardware/CPU with 301 requests,
- Seventy-eight computers were installed or reconfigured,
- New equipment check-out procedures were implemented,
- New data-storage sanitation procedures were implemented protecting PSC information.

Training

Forty-three classes were conducted helping 178 PSC Staff and external stakeholders learn how to do business using the PSC information systems.

Remote Access

- Implemented new remote networking services utilizing VPN over Internet.
- Connected audit sites using utility company Internet connection and VPN for greater performance.
- Connected 123 users and three audit sites with 30 Staff through VPN and Outlook Web Services.

Virus Prevention

Upgraded e-mail virus protection. The e-mail message-body is scanned for malicious code. E-mail attachments are scanned for viruses. When an e-mail virus or unauthorized attachment type is found, the e-mail is deleted and the recipient is notified with an event log describing what action was taken and why.

Implemented new enterprise virus protection in a managed environment with real-time protection. Virus definitions are updated automatically and clients receive updates when logging into the network.

The e-mail server scanned over 16,527,000 message bodies and over 33,100,000 attachments totaling over 1.4 TB of data. Average scan time is 67 milliseconds each. The PSC had no virus-related system outages.

Backup Systems

Upgraded back-up/recovery software - back-ups are conducted nightly on vital servers. Approximately 4 million files adding up to over 180GB of data were backed up each night. Back-up processes run approximately 7-hours each night.

PSC and Division of Professional Registration have a partnership sharing offsite storage of back-up media. Media is rotated weekly between our two facilities.

Access to Information

Configured content management and secure access to staff permitted to maintain information on the web server. This saves time and helps ensure the data published to the Internet is current.

The PSC Internet site received 11,117,444 hits with over 4.3M documents served to over 108,000 unique visitors. Of the over 108,000 unique visitors, approximately 31% visited the site more than once in the year

Business Process Redesign

Conducted over 60-days of business process analysis, two roundtable meetings and six user group sessions. Business process analysis was performed to improve the way PSC processes tariffs using its Electronic Filing and Information System (EFIS). The business process and application redesign was handled in two phases called "Tariff - Phase I" and "Tariff - Phase II" using data collected during business process analysis, approved application change orders, and input from user group sessions.

Electronic Filing and Information System (EFIS)

- Twenty-two qualified and approved change orders were successfully implemented.
- EFIS was recognized by the Workflow Management Coalition and WARIA with the 2004 Gold, Global Award for Excellence in Workflow - North America.
- EFIS was recognized by the National Association of State Chief Information Officers (NASCIO) for Outstanding Achievement in the category of Digital Government - Government to Business.
- There were 594 new cases entered, 9,340 case-related filings, 2,074 tariff-related filings, 12,767 consumer complaint-related filings, and 5,146 company registration-related submissions made for a total of 31,887 total transactions.
- EFIS User Group was formed and meetings are held quarterly.

Network

- Upgraded file servers.
- Increased SAN by nearly 1TB. Performed SAN firmware upgrades.

- Joint venture with TCRC/Missouri National Guard for video conferencing. Configured existing infrastructure to support video conferencing to local public hearings at sites throughout the state. Initial findings show that thousands of dollars will be saved in travel expenses per annum.
- Network infrastructure uptime of 99.5%.
- Server uptime of 99.5%.

Planned Projects

Toolbox Redesign
A new case management system is being developed for the Missouri Department of Economic Development's Division of Workforce Development. Known as "Toolbox", the case management system is used by staff and partners located in Missouri Career Centers to help citizens increase their career levels and skill sets and provide candidate-matching services to businesses. The newly redesigned Toolbox will offer a streamlined method of delivering services and provide a more complete, accurate tracking tool.

Internet Content Management
The ability for divisions to manage their own web page content has become an increasingly important feature of web support. Business units need to be able to react quickly to update and change content in order to address changing business needs. Web content management will be implemented on the DED internet, allowing divisions to modify or change web content as needed.

Enhancements to Customer Management System (CMS)
The department's numerous customer contacts and the services and products provided to them are tracked in the CMS system. The first portion of the system to be implemented was the financial products, such as tax credits and grants. Additional features will be identified and implemented to provide more complete tracking information to the various DED business units.

On-Line Renewals - Full Implementation
The current process for renewing licenses with the Division of Professional Registration is labor intensive and slow. Renewal forms are sent to licensed professionals through the postal service. Once received, the licensed professional completes the form and returns it to the Division of Professional Registration where the form is reviewed, the information is entered into the licensing system and a license is issued. This full implementation of the online renewal system will allow licensed professionals to renew their licenses via the Internet, thus eliminating a number of steps from the process and reducing cycle time.

The pilot phase for online payment processing has been completed. The next phase is to bring rest of the boards into full implementation of the system.

Disaster Preparedness Database and Website

This project is a joint effort between the Missouri Division of Professional Registration and the Missouri Department of Health. The purpose of this project is to track and report demographic and specialty related information for professionals in the State of Missouri for possible use in the event of disaster. Since the Division is the licensing authority for professionals in Missouri, the additional information will be used to augment the current licensing system. Once the data is accumulated, the information will be available via a website that will allow for specific reporting and ad hoc searching for professionals with specific demographic or specialty criteria. The system will allow licensees to indicate if they wish to participate as a volunteer in the event of a disaster. The primary users of the system will be both public and private organizations or groups that are attempting to do disaster planning or who are attempting to respond to an existing disaster with specific information on available resources such as professionals.

Remote Inspection Report Automation

This is an internal project to the Missouri Division of Professional Registration that is intended to provide an automated method for allowing remote staff to create and share inspection reports. The current system is based on paper forms and requires entry both by the remote staff as well as staff located at the Division. There is also a time lag in getting data from the paper forms into the current licensing system since they must be sent via postal mail by the remote staff to the Division staff.

The project will web-enable inspection forms and allow information to be transferred into the current licensing system. This will eliminate the need for Division staff to enter the inspection reports manually into the current licensing system. The remote field staff will also be able to use the web-enabled application without the need of any additional software or configuration changes.

Electronic Filing and Information System (EFIS) V2

EFIS V2 is a redesign project integrating the PSC Internet site content and functionality, mature functionality in EFIS V1 and over 60 approved change orders resulting in greater efficiencies, lower total cost of ownership and greater return on investment.

Project goals are:
- Lower total cost of ownership by 50% per annum.
- Modular design with the highest portability. Each module able to operate independently. The modular design offers the ability to upgrade modules independent of the application as a whole.
- Ability to share the application or modules with other state agencies and other state utility commissions.
- Improve disaster recovery, thus allowing the ability to bring the system online remotely with little reliance on the underlying operating system and hardware.

Accumulated Demand

Web Development and Application Reengineering
Several business units within the department have identified the need for new functionality and, in some cases, the need to rebuild legacy systems. These development efforts will include new Internet functions that are designed to provide more appropriate information and a more streamlined delivery of services to the department's business users, both internal and external.

Internet Enablement of New and Existing Business Processes
As more and more of the Missouri Division of Professional Registration's business is moved to the Internet, such as online renewals and disaster preparedness, there continues to be an increase in the demand for additional business processes to be migrated to the Internet as well. Examples of these additional business processes include new applications, compliant filing, and continuing education tracking. The focus of this migration is to improve service and reduce process time to professionals as well as to any groups involved with them.

There are additional demands from the boards at the Division to be able to improve their internal business processes technology such as the Internet and other web services. The demand for this type of work is expected to continue beyond the existing project list.

Further Use of Technology To Offset Shrinking Budgets
Extensive demand is expected from the boards at the Division for the further use of technology in order to offset shrinking budgets and, at best, static staffing levels. In the past this demand had lead to the implementation automated agendas, Intranet website, the optical imaging system, content management system, and integrated faxing services. There are currently pending requests for these types of projects. Current project priorities and limited resources are the current factors in developing and implementing these requests.

Additional Information Sharing Requests
With the completion of the Disaster Preparedness project (see Planned Projects section), demand for information sharing is expected to increase dramatically. State and local governments as well as the federal government are expected to increase their requests for this type of information. The passage of HB 600 and related data sharing is one example of the expected increase of demand in this area. Considerable effort is expected in order to meet those demands.

Web-enabled Service Provider Information
Using service territory data, state maps and other geospatial data provided by various sources internal and external, the PSC will develop a Service Provider Information service on the Internet site. A user will point on the state map, click in a region and drill down to a county, city or address. Once the location is selected, a list of service providers and their contact information would be reported to the user.

General Department Profile (2004)

Department Name		
Economic Development		

Street Address	City	Zip
301 West High	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4962	*573-751-7258*	*www.ded.mo.gov*

Department Director		
Kelvin Simmons		

Number of FTE (entire department)	Approximate number of citizens served
1619	*Universal (International Marketing, Missouri Works!)*

Agency Mission (brief statement)
We will achieve our vision by stimulating and supporting economic security, opportunity, growth and a high quality of life in Missouri communities.

Department CIO and IT Division Profile (2004)

Department Name		
Economic Development		
Department CIO Name		
Bob Meinhardt		

Street Address	City	Zip
421 East Dunklin	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-5466	*573-751-1217*	*bob.meinhardt@ded.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement
(i.e., NASCIO – serve on architecture standards committee)

ITAB Member, Architecture Review Committee Chairperson

IT Division Name	Website URL
Management Information Systems	*ded.mo.gov*

Number IT FTE (located in central office)	Number IT FTE (located in field)
66	*0*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded

Security Officer Name	Phone No.	E-mail
BJ Atchison	*573-751-0435*	*Bj.Atchison@ded.mo.gov*
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Cathy Reinkemeyer	*573 751-4312*	*cathy.reinkemeyer@ded.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail
Jayne Wack	*573-751-5461*	Jayne.wack@ded.mo.gov

Department Technology Profile (2004)

Department Name	
Economic Development	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Windows2000,NT, Linux, FreeBSD, OpenBSD*
Mid-range	*AIX*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 95, 98, NT, 2000, XP, Linux, MAC*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET, Socket	
Security Provisions (packages, anti-virus, filters)	
Network	*Router based access list, IPFW, IDS, PPTP, IPSEC, SSH*
Desktop	*Norton*
Internet	*Same as "Network"*
Help Desk Packages (Magic, GWI)	
Magic Helpdesk	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, MySQL ,Microsoft SQL server	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
COBOL, SAS, CICS, PL/SQL, VB, Perl, .net	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL, SSM, PPTP, IPSEC	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

CVS
Telecommunications (T1, Frame Relay, etc.)
DS3,T1, Frame Relay, MAN
GIS (ArcView, MapInfo)
ArcView

Office of Information Technology
2004 State of the State IT Report

Dept. of Elementary and Secondary Education

Overview

The Department of Elementary and Secondary Education (DESE) continued the development effort that allows the department to interact with public school districts through worldwide web applications. DESE will continue to enhance existing data marts and provide new data marts for these systems to address data analysis and reporting needs. DESE plans to complete a technical infrastructure upgrade in early calendar year 2005.

Accomplishments

MAP Reports on the Web
Existing Missouri Assessment Program (MAP) reports previously sent to school districts on CD have been moved to a web-based environment. This eliminated mailing costs and will give the districts the ability to look at data from any computer attached to the Internet instead of loading software on individual machines. Future plans are to add analytical functionality and ad-hoc capabilities.

Medicaid Reimbursement for State Schools for the Handicapped
Due to HIPAA requirements, Medicaid claims must be submitted in a more secure manner. DESE personnel developed a system to take Medicaid information and convert it into the proper format to transmit into the Medicaid system. Outsourcing this work would have cost the agency roughly $60,000 per year. There was a significant savings by developing the system in-house.

Converted Old Data Entry Programs to New Environment
DESE converted mainframe data entry programs for interim use as the mainframe is being phased out. Three data entry programs were converted and moved into the business areas freeing up an FTE.

School Foods Direct Certification
This system provides participating school districts with information from the Department of Social Services on students who are automatically certified as eligible for free or reduced price lunch. The new web application was used in June 2004.

Appropriate Certification Report System
This project has made available, via the web, reports that were previously printed and mailed to school districts. One of these reports is the Inappropriately Certificated Report. It indicates those educators who are not appropriately certificated to teach the courses they are teaching within a school year so that the district may determine a remedy for the situation. This report is produced for use by the school districts and DESE staff only. The report distributed to the district contains only that district's information. The other reports are statewide indicating the number and percentage of educators who are appropriately certificated as well as the number and percentage of errors within the system and those educators not appropriately certificated. One or more reports will be produced indicating all educators who hold no certification, certification has been revoked, or all certificates held have expired.

Vocational and Adult Education Contracted Services Payment
The Contracted Services payment in the Career Education division has been re-engineered. Previously, the system was paper-based with forms passing between the eligible school districts and DESE personnel a minimum of four (4) times. The new payment is based upon data collected from the school districts via a web page and the calculation performed based on a percentage rate established by the Assistant Commissioner. This new payment was made for the first time in May 2004.

State Special Education Payment
The process for making the Special Education Exceptional Pupil Aid (EPA) payment was transferred from the current mainframe to a newer environment. Several improvements were made to the process, reducing the amount of work necessary. The payment has been running in "estimated" status since July of 2004 and will make the first "live" payment to the school districts in the January payment. This delay is due to collection of data used in the payment through other systems. In addition, several other manual payments have been automated through this process. These include the Handicapped Census payment, the Extended School Year payment, the Homebound payment, and the Vocational Special Needs payment.

School Food Services Review Management
Each of the school districts' food services efforts must be reviewed on a periodic basis. The School Foods Services Review Management system provides the School Food Services section the ability to manage these reviews and track the results. Reports indicating which districts need to have reviews in the coming year also are available. This system previously existed on the mainframe environment and was transferred to a web based system in summer 2004.

Core Data Collection System

The main portion of the Core Data Collection system was completed in calendar year 2002. However, the system was written using the Advantage:Gen toolset. Efforts have been made in 2004 to transition to the new .NET toolset. This transition allows for less costly maintenance fees for the toolset as well as enhanced flexibility for enhancements. With this effort, edits have been enhanced and added to each page that has been transitioned to the new technology. In addition, requirements from the federal No Child Left Behind (NCLB) Act were added to the system.

Federal Consolidated Grant Enhancements

Per requirements of the federal No Child Left Behind Act, several changes were needed to the Federal Consolidated Grant system. These changes were made and effective in May 2004 for the 2005 Fiscal Year.

Data Marts

During the past year, DESE has continued to make more data available to the business community for ad-hoc queries and reports. The first stage of a reporting data mart containing the school district key educational indicators Building Level Indicator Support System (BLISS) was completed. This data mart contains demographic, educator, and attendance data at the building, district and state levels. Other new data marts include Federal Grants (currently in user testing) and Perkins Expenditure. Existing data marts where enhancements were made include Census of Tech and Early Childhood Special Education.

Performance Based Data Management Initiative

The Performance Based Data Management Initiative (PBDMI) is a combined effort between the federal government and the states to improve the data collection and submission process to the federal Department of Education. DESE is in the process of developing data extraction procedures to create the requested data files per requirements received from the federal government.

Database Administration

DESE is in the process of migrating all transactional and data warehouse/data mart databases from an Oracle DBMS to a SQL Server 2000 DBMS. During this process we will also be moving from an AIX environment to a Windows 2000 environment to host the databases. This will be completed in calendar year 2005.

Advantage Gen Upgrade

DESE is in the process of migrating from Advantage:Gen 6.0 applications to Advantage:Gen 6.5. This will keep our current Advantage:Gen systems within the Computer Associates support window as we migrate to the .NET framework. The Advantage:Gen 6.5 server procedures will reside on a Windows 2000 server (currently, they reside on an AIX server). This upgrade should be completed late 2004/early 2005.

Planned Projects

Appropriate Certification Report System
In addition to the reports completed in 2004, an additional report will be produced indicating all educators who hold no certification, certification that has been revoked, or all certificates held that have expired. This report will be used to analyze whether state aid payments to school districts need to be reduced when certain certification requirements are not met.

Federal School Improvement Plan
The Federal School Improvement Plan required by NCLB gathers information from school districts concerning schools designated as needing improvement. This designation is derived from Adequate Yearly Progress (AYP) calculations. A school must remain in school improvement status for a minimum of 2 years and must develop a plan within 90 days of being designated that describes the processes the school will implement to improve student achievement. Monies available through the Title I grant will be allocated to the schools with the actual payment based on the district's final expenditure report for the year.

Core Data Collection –Reports, Edits
The main portion of the web based Core Data Collection system was completed in calendar year 2002. Little progress has been made on reports to date, due to higher priority items for the department. However, several new edits have been implemented as Core Data Collection web pages have been transformed into the new technology. There are additional edits to be added and a more concentrated effort will take place this year to produce summary and edit reports for the districts' use.

Early Childhood Special Education System
As part of the transition away from the current technology, the Early Childhood Special Education system needs to be rewritten into the new technology. In addition, the Special Education Division is planning changes to streamline the current process and to ensure payment based on expenditures. This will reduce the number of overpayments made to the school districts that require adjustments the following year. Unnecessary information currently being collected will be eliminated and some information collected by other systems within DESE will be used in place of duplicating data collection. This will reduce the work load for the school districts eligible to receive this funding. Finally, the current process for payment, made on the DESE mainframe, will be transitioned into the new technology as well. This will eliminate all but one (1) process for the Special Education Division from the mainframe environment.

Professional Development within the Educator Certification System
As result of the statutory change made by Senate Bill 296 2003, it is now a requirement for all educators to complete annual professional development in order to keep their license "active". DESE needs a method of collecting the Professional Development activity and making a determination of whether compliance to the statute has been

maintained. The Professional Development project will collect these data from public school districts and non-public schools, and provide a method for Educator Certification to determine which educators could become inactive and notify the school districts in advance so that they can ensure the educators comply with the statute.

Parents as Teachers System
The process currently in place to submit, receive, and approve applications for Parents as Teachers funding is totally paper based. The need for automation has grown as the number of applications has grown. This system will collect data, for use by the Early Childhood Section, needed for the Parents as Teachers Program. In addition, coordination with the national certification group for Parents as Teachers will be done to ensure proper certification of the applicants. The payment, which is currently performed on the mainframe, will be transitioned to the new technology.

Fingerprints of Non-certificated Staff
Effective January 2005, all non-certificated staff hired by school districts must be fingerprinted and have background checks. The required documentation is submitted to DESE and then transmitted to the Missouri Highway Patrol. The coordination of this effort will flow through the Professional Conduct and Investigation arm of the Educator Certification group. Automation will be necessary in order to track the processing that has been completed and the processing still needing to be completed.

School Food Services Contract Management
School districts are allowed to contract the management of their school food services effort. These contracts must have a specific ending date and be approved by the School Food Services Section. The School Foods Contract Management system will allow the School Foods Section to more easily manage this process.

Remedial Reading
The current process for the Remedial Reading payment is performed on the mainframe environment. This project will take all processing of data, reports, and the payment into the new development toolset. With additional edits added to the process, a reduction in time needed to review and produce this payment is anticipated. In addition, reports will be available to the school districts via the web environment for their review thus reducing mailing costs of reports.

Proposition C Payment
The current process for the Proposition C payment to school districts is performed on the mainframe environment. This project will replace that process and put the payment into the new technology thus allowing for movement from the mainframe environment.

Career Education Grant Processes
Several grant processes within the Career Education Division have previously been paper based. In the coming year, these processes will be reviewed, re-engineered, and automated from the Invitation for Bid (IFB) through payment stages. This automation

will allow for more consistency between the grants and will remove the payment processes from the mainframe environment.

Student Identification System

In order to fully comply with the No Child Left Behind Act, it is necessary to track individual student assessment scores from grades 3 through 8 in order to determine if a student is improving. This requires a method to uniquely identify students. Several options are being reviewed at this time for a Student Identification System, with the projected timeline for implementation of fall 2005.

Update District Security System

Updating the current security system will give better flexibility and control to the districts. The current system is not very user friendly and is difficult for districts to use. This adds an additional workload to IT staff. The new system will reduce IT data entry and reduce the need for districts to submit forms to DESE.

Create Data Portal for Public, Districts and Internal Users

Improve the DESE's data web presence. Develop and implement a portal to allow easier access to DESE's public data. Features of this portal could include customization of interface, ad hoc queries, and ability to manipulate outputs.

Career Ladder Payment

The current Career Ladder payment is processed on the mainframe. This project will review that process, identify where improvements can be made, and move it to the new technology.

Transition from Advantage:Gen to .NET development Toolset

An effort to transition several systems that do not need process changes from the Advantage:Gen toolset to the .NET toolset will be undertaken using outside resources. A member of DESE staff will be involved to provide direction as well as to understand the technical processes involved. In addition, which processes are being transformed, training of DESE personnel who have not been involved in the .NET toolset to date will be done. This is related to the earlier Advantage:Gen upgrade. The upgrade will keep DESE supported on this tool until we can complete migrate to the .NET framework.

Accumulated Demand

There are currently 34 New Development requests and 100 Product Enhancement requests on the Project Request List for DESE. Of these requests, 10 New Development and 14 Product Enhancements are currently underway.

General Department Profile (2004)

Department Name		
Department of Elementary and Secondary Education		

Street Address	City	Zip
205 Jefferson St.	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4212	*573-751-8613*	*http://www.dese.mo.gov*

Department Director
D. Kent King - Commissioner

Number of FTE (entire department)	Approximate number of citizens served
1968.15	*Citizens of Missouri. DESE directly serves the 524 public school districts in the state.*

Agency Mission (brief statement)
The Department of Elementary and Secondary Education is a team of dedicated individuals working for the continuous improvement of education and services for all citizens. We believe that we can make a positive difference in the quality of life for all Missourians by providing exceptional service to students, educators, schools and citizens.

Department CIO and IT Division Profile (2004)

Department Name		
Department of Elementary and Secondary Education		
Department CIO Name		
Paul G. Wright		

Street Address	City	Zip
205 Jefferson St.	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-7363	*573-526-4125*	*Paul.wright@dese.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

MoVAP Committee Chair, MOTEC Committee Chair, Performance Management Committee Chair, Jefferson City Information Technology Coalition (JCITC), Risk Review Committee

IT Division Name	Website URL
Information Technology	*www.dese.mo.gov/divadm/infotech*

Number IT FTE (located in central office)	Number IT FTE (located in field)
22 (DESE Central Office)	*27 (Vocational Rehabilitation Office-JC)*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
0 (No requests made.)	*0*

Security Officer Name	Phone No.	E-mail
Steve White	*573-751-9821*	*steve.white@dese.mo.gov*

Privacy Officer Name	Phone No.	E-mail

ITAB Alternate Name	Phone No.	E-mail
Diana James	*573-751-4478*	*diana.james@dese.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
Department of Elementary and Secondary Education	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM X232 running VSE 2.7*
PC Servers	*Windows 2003*
Mid-range	*UNIX (AIX)*
Networked	*Windows 2003*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP, Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
ATM	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-virus, Cisco IDS*
Desktop	
Internet	*Norton Anti-virus, Cisco PIX, Cisco IDS*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle 8.1.7	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Maintenance Only: COBOL, CICS, CSP, Advantage:Gen *New Development: .NET*	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange 2003	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Source Integrity (MKS)
Telecommunications (T1, Frame Relay, etc.)
T1 and Frame Relay
GIS (ArcView, MapInfo)
ArcView

Office of Information Technology
2004 State of the State IT Report

Department of Health and Senior Services

Accomplishments

During 2004, the department continued its progress on developing a statewide, integrated public health system, and enhancing the Missouri Strategic Architectures and Information Cooperative (MOHSAIC). MOHSAIC is recognized as the nation's most fully integrated public health system and has been written up in a national public health journal and a chapter of a new health informatics textbook is used to describe DHSS' experience in developing and implementing MOHSAIC. The Office of Information Systems continues to break new ground in better communications and increased capabilities in identifying public health issues and providing DHSS with the necessary tools to ensure the quality of life and health for all Missourians. Our accomplishments and planned projects are the following:

- A new technology was implemented to allow users to connect to Mainframe applications across the DHSS enterprise. This technology is more user-friendly and saves the state more than $40,000 annually in Maintenance costs.
- The Health Management application was enhanced to further improve data entry of Immunizations.
- The Strategic National Stockpile application was enhanced to track all requests and approvals from the stockpile. This augments the inventory system already in place.
- Developed an integrated sample tracking system for the State Public Health Laboratory (SPHL). This includes samples from all testing units. This will allow for a more efficient communication process from the SPHL to DHSS so program staff can react better and faster to outbreaks and disease problem area.
- DHSS has developed a web-based Child Lead Level Program that was implemented in mid 2004.
- DHSS is developing the Family Care Safety Register (FCSR) to include a web interface for daycare providers in order to speed up some background checks which will speed up the hiring process.
- DHSS completed development of the Show Me Healthy Women application that will better track women's health issues. It was implemented mid 2004.

- DHSS is in the process of integrating new web-based Tuberculosis Infection reporting functionality into the DHSS Web MOHSAIC application. DHSS is also building a data warehouse for Tuberculosis Infection data entered via Web MOHSAIC for reporting and analytical purposes. Implementation is expected first quarter of 2005 after all quality assurance requirements are satisfied and funding becomes available.
- DHSS worked with a third party software provider to obtain and enhance a Learning Management System to track the training activities of the public health work force for bio-terrorism and other public health activities via a web application. Implementation of this system has begun.
- Completed work of Newborn Hearing Screening Program and Electronic Data Exchange from Newborn Screening Laboratory into the integrated public health system. Integration of case management for Newborn Bloodspot Screening and Sickle Cell programs will be completed by the end of calendar year 2004. Both integrations will provide data access to birthing facilities and health departments throughout the state, allowing access for providers and clinics to patient data that may be vital to patient care.

Disease Surveillance
- The Surveillance application was enhanced to provide the reporting of influenza in summary format to meet CDC reporting requirements, provide the automatic loading of data from electronic sources through the Surveillance QA process, and provide an automated process to send e-mails when pre-selected conditions are reported via the Internet.
- DHSS implemented a web-enabled active syndromic surveillance system (BTS Sentinel), Bio-terrorism Surveillance Sentinel to gather in real time data entry from hospitals reporting numbers for the following seven complaints: gastrointestinal illness, hemorrhagic disease, respiratory illness, neurological illness, rash illness, fever illness of unknown origin and chemical exposure with sudden onset.
- DHSS developed an interface that will accept hospital laboratory data and analyze it for trends that could indicate a disease outbreak or bioterrorism attack. DHSS also contracted with a private company to go into hospitals and develop a system to extract the laboratory data from each hospital's client tracking system and to submit the data electronically to DHSS in a common format. During 2004 DHSS added additional hospitals in major metropolitan regions.
- DHSS has established the infrastructure to begin receiving hospital emergency room chief complaint data electronically and promulgated an administrative rule with the required formats. DHSS began piloting this system with 5 hospital groups and is receiving data from a total of 22 hospitals. Automatic and manual analysis routines are under development to detect events and anomalies in the data received. The data will be automatically analyzed for trends and patterns and appropriate notifications sent based upon the results, reducing the manual effort required of hospitals to report this data.
- DHSS has converted and implemented the CDC Public Health Information Network Messaging System (PHIN-MS) to operate under IBM WebSphere. This

system will provide secure, standards-based data exchange with public health partners including the National Centers for Disease Control (CDC), other Federal Agencies, other State Public Health Agencies, hospitals, and laboratories.

Senior Services

- DHSS developed the HCS Provider Database system for the Home Community Services Section of the Division of Senior Services. This system tracks information on the providers who deliver in-home services to Missouri's elderly citizens. Providers serve each of the state's 114 counties and the city of St. Louis providing services such as personal care, homemaker/chore, nursing services, counseling, respite, and case management to the elderly and persons with disabilities in their homes. Adult day care is also available as an alternative to institutionalization.

- DHSS fully implemented the Division of Senior Services Technology Pilot – Phase I. The pilot converted several paper forms to electronic media in an effort to better support the more mobile workforce created by office consolidation. The Office of Information Systems (OIS) provided several technology solutions to meet the growing needs and demands of the pilot. OIS provided training for 3 groups of pilot staff, covering the use of laptops, mobile printers, network data storage, e-mail, and broadcast fax. The pilot proved to be rather successful for the 20 participants and has helped expedite hotline investigations to provide better support for our state's senior population. The caseworkers now spend more time with clients, and less time processing paperwork in the office.

- DHSS Division of Senior Services reduced the number of regions statewide for Home and Community Services from 10 to 6. Several counties were also shuffled from one region to another in order for caseworker loads to be more evenly dispersed. Over 150 computer program modules were revised to change sorting and distribution of reports, and online information.

- DHSS Division of Senior Services successfully completed the transition from RAPID to using SAS software to distribute e-mail reports. The group worked closely with the State Data Center to come up with a viable solution that could eliminate the use of the antiquated Lotus Messaging Switch software. Nearly 30 reports are now sent as e-mail attachments directly to users on a daily basis. This eliminates hard copy print costs and expedites the delivery of information.

- DHSS established a new and improved contract with the Social Security Administration (SSA) for electronic verification using EVS-212 to process the Social Security numbers associated with the state Employee Disqualification List (EDL). This removed the previous dependency the EDL Unit had on the Department of Social Services for this data transfer. The quarterly processing is free of charge to the program and enables them to sanitize the EDL data to keep perpetrators of elderly abuse/neglect/exploitation out of job roles providing in-home and institutional care. Information turnaround time with SSA has been

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reduced from weeks to days now that the data is being transferred via a high-speed line connection.

- DHSS automated the daily manual process of enabling the reporting of Employee Disqualification List (EDL) information via the intranet. The EDL web-based application was also revised in order to meet the department's new website standards.

- DHSS implemented a new service for client authorization, provider delivery, and Medicaid payment entitled Adult Day Care – Basic (or 'D3'). This service provides continuous care and supervision of aged and disabled individuals in an Adult Day Care setting. The program offers assistance with daily living, planned group activities, food services, client observation, and transportation to and from the facility. Adult Day Care – Basic is provided to individuals that would otherwise require nursing facility level of care.

- DHSS improved the data transfer of the Missouri Medicaid Fiscal Agent's (Verizon) monthly prior authorization file. The data used to be shipped once a month via tape cartridge from Fort Wayne, IN. Data is now being sent over a high-speed line connection using Connect Direct software making the transfer more accurate, timely, and dependable. Tape cartridges no longer have to be manually catalogued, mounted, scratched, or returned to the supplier.

- DHSS created a solution that would allow new worker number assignments and the reuse of old numbers for Home and Community Services (HCS) caseworker loads. This change removed the responsibility from the DHSS Office of Personnel and placed it more appropriately with HCS. Revisions made this summer to SAM II forced staff to reconsider how this activity was currently being handled and come up with a resolution that would allow it to effectively continue.

- DHSS fully implemented several new online transactions used by the Long-Term Care (LTC) Quality Assurance Unit. The new online screens allow LTC to enter information on alleged perpetrators where allegations have been substantiated in an institutional-type setting. Previously this information resided only in a federally mandated database that could not be shared with other computer applications. This improvement has eliminated searching multiple computer systems for this information.

- DHSS produced several special ad-hoc reports this year, for example: a time-sensitive demographic report for Washington University for their several month case study; a report on the impact to clients should the Division of Medical Services (Medicaid) decide to reduce the cost cap on certain services; a report of low-income elderly that may be eligible for the prescription drug program through Senior RX; Aged and Disabled Waiver reports on clients in the St. Louis area that would be impacted by the level of care reduction in the Program for All-Inclusive Care for the Elderly (PACE) (also helping to determine the cost of the LOC reduction to the state).

- Implemented a web-enabled application to support the Division of Senior Services and Regulation's Central Office Medical Review Unit (COMRU) to replace the old Lotus Notes application residing on an AS400, which was obsolete and no longer under a service contract. New functionality is being worked on to improve reporting capabilities and allow for inquiry from outside agencies. This will improve the Medicaid approval process for nursing home admission.

- DHSS converted monthly, quarterly, and annual SAS reporting programs to COBOL for the Health Research Group. This change will save staff processing time for the Health Research Group.

Women, Infants and Children (WIC)

- DHSS implemented "Direct Entry" Phase II. This is the second phase of a project to minimize the need for paper forms during Women, Infants, and Children (WIC) registration and certification. This enhancement has improved processing and provided a more pleasant experience for the client.

- DHSS implemented system changes to enhance WIC Vendor reporting. These changes provided for an automated, more organized and easily readable spreadsheet format for the TIP vendor file. This replaced some manual processing and allows the user to more easily gather information for federal vendor reporting.

- DHSS implemented system changes to allow WIC clients to receive the new LIPIL infant formulas introduced by Mead Johnson. LIPIL means the formula contains fish oil, which is believed to improve brain function and vision.

- DHSS provided St. Louis University with WIC certification and head circumference data needed for work on a prenatal mental health grant dealing with WIC prenatal participants from the St. Louis area.

- DHSS finalized the Food Frequency Questionnaire (FFQ) for 2003. This is the process of collecting data on the living and eating habits of WIC participants. The data is formatted and sent to Harvard University. Harvard University does an in-depth analysis of the data and reports results back to Missouri WIC. Among other benefits this helps the WIC program and WIC participants by providing data on nutritional education that may be needed.

- DHSS completed a biennial project mandated by the USDA to provide data on WIC participant characteristics to the USDA/Food and Nutrition Service (FNS). This provides USDA/FNS with the most comprehensive and up-to-date statistics on state WIC programs; used to estimate budgets, design research and review current and proposed WIC policies and procedures.

- DHSS is currently working with WIC on a federal grant to support major enhancements to the CDC reporting system. CDC does in-depth analysis of data received quarterly from Missouri WIC and returns reports based on this analysis.

Benefits of these enhancements include better assessment of health problems, at-a-glance geographic comparisons, and immediate response to states upon CDC receipt of data.

- DHSS implemented enhancements to the automated nutritional risk processing within the WIC system allowing the WIC agency to more accurately assess and assign nutritional risks for WIC participants.

- DHSS converted the monthly Early Periodic Screening and Diagnostic Test (EPSDT) report for Maternal Child Family Health from paper to electronic format using MOBIUS. This change results in a direct savings of more than $9,000 per year in printing and mailing costs for the department.

Vital Records

- DHSS enhanced the online retrieval of birth and death information eliminating the Vital Records staff reliance on the daily printed reports. Previously these reports were sent through inter-agency mail which would take 2 to 3 days. Errors can now be corrected and resubmitted in a timely manner.

- DHSS implemented an on-line transaction for the Vital Records staff to access name and location of a facility, whether it is a hospital, physician, or funeral home. This process was previously done manually.

- DHSS added informant and mother's name to the death database. This enabled the Vital Records staff to print death copies from the system versus pulling hard copies for the Child Review Safety Board. Reports are also generated for non-residence reporting to other states.

- DHSS implemented geographic place code changes, which are required by the National Center for Health Statistics effective with the reporting of 2004 data.

- DHSS enabled Vital Records staff to update and print new birth certificates in real-time; rather than rely on the previous process that was an overnight (batch) process.

Data Warehouse

- All data added or updated in MOHSAIC is moved to the department's data warehouse. DHSS develops subject-specific data marts to simplify the development of reports. A variety of tools are employed by users to develop reports from the data in the data warehouse, including SAS, Crystal Reports, MS Excel, MyEureka, Epi Info, and MS Access.
- DHSS has expanded the data warehouse to include WIC client information extracted from the WIC mainframe transactional system. Development to create data marts to improve the department's capacity to measure performance measures and outcome goals will be completed during early 2005.

Other

- DHSS continued to improve upon the existing Organ Donor Registry system by adding new enhancements for reporting and quality assurance. DHSS now has the ability to report by Department of Revenue offices the number of registrants and the dollars donated to the registry.

- DHSS converted and upgraded several out-dated databases used within the department to Microsoft Access.

- DHSS continues to implement system improvements and adjust reporting for the Regional Arthritis Centers (RACS).

- DHSS successfully developed the Center for Local Public Health Survey (CLPHS) 2005 to present and receive core function information from all local public health agencies through the Internet.

- Implemented the e-mail notification of employee expense account deposits. When the Division of Aging employees were part of the Department of Social Services they were notified of expense account deposits. The Department of Health did not have this functionality in place. When the Division of Aging was transferred to the Department of Health, the employees requested to be notified of deposits.

- Added functionality to assist in breaking down the State Data Center (SDC) costs. This will aid in assuring that various programs are billed for SDC costs based upon percent of usage instead of other methods.

- DHSS is working to implement Microsoft Project Enterprise as part of an effort to improve project management for its application development projects. This will allow better tracking and management of application development costs, earlier response to project issues, better efficiency in balancing resource work assignments across projects, and better reporting of project status.

- DHSS migrated its Sexually Transmitted Disease database into a state-of-the-art system. This allows users of the system to view and enter data statewide. This increases end user productivity and provides for a safer Missouri.

- To comply with CDC grants DHSS will implement a Blackberry system among senior level officials. The system was piloted in 2004 and will allow the Emergency Notification System and the DHSS DSR (Disaster Situation Room) to be in contact with officials 24 hours a day.

- DHSS has implemented email SPAM filtering that reduced the amount of SPAM email. The net result is users are more productive and the network is more secure.

- DHSS implemented a VPN solution to provide a secure real-time disease out-break surveillance data collection system. This reduced the amount of time it takes to collect disease surveillance data and provides a safer Missouri.

- DHSS implemented a DMZ architecture to present applications to the Internet. This allows easier access to DHSS applications and greater improved the security of departmental data.

- DHSS has conducted annual network vulnerability assessments as required by CDC bioterrorism grants. Improvement plans were developed and implemented on an on-going basis.

- DHSS has implemented an Intrusion Detection System (IDS) to detect network security threats as they occur. IDS implementation has improved the security of departmental data needed to protect the citizens of Missouri.

- DHSS has improved the quality of video conferencing by upgrading the data circuits used for video conferencing. This improvement has allowed additional use to the video conferencing system, improving communication, providing additional training to business users and reducing travel time and expenses.

- DHSS has implemented a SAN (Storage Area Network) for centralized data storing. This reduces the overall storage costs, provides greater storage flexibility and capacity to meet the needs of the department.

- DHSS has implemented a MCC (Mobile Command Center) for deployment during a disaster event. The MCC is equipped with voice and data satellite communication capabilities to provide access to DHSS applications that improve Missouri's ability to respond to an event.

- DHSS has implemented an Imaging/Document Management system, which improves office workflow enabling departmental programs to respond to the needs of the citizens in a timelier manner.

- DHSS staff have applied and received approval to utilize the Universal Service Fund. This provides funding for a portion of the circuit costs to Local Public Health Agencies.

- DHSS has deployed new routers to 239 of the 254 remote facilities. New routers will provide improved data security (via VPN tunnels) and QoS. The vendor no longer supported previous routers.

- DHSS has provided use of its Broadcast Fax to send out Amber Alert broadcasts.

- DHSS has implemented wireless access points in its Wildwood campus. This will provide for a more mobile workforce and additional network access.

- DHSS has implemented "hot" backups for the GroupWise email system. This allows for 24x7 email availability to receive HAN (Health Alert Network) Alerts from CDC to protect the citizens of Missouri.

- DHSS identified over 400 computers running Window 95, 98 and NT this past year. Since these products are past the vendor's life cycle, the OIS staff has replaced over 300 of these computers. This will make for a safer networking environment and improved productivity for the end users.

- The USDA provided funding for the OIS staff to replace 201 computers in County WIC clinics throughout the state of Missouri. The field services unit installed the computers with the latest software and virus protection.

- Over the past year DHSS set standards for printing devices. This was accomplished to provide better service to our customers and provide a savings via purchasing power with the printers and supplies.

- To ensure the DHSS Health Alert Network stays virus free, OIS employees assisted the Local Public Health Agencies (County Health Offices) with eradicating viruses. DHSS has acquired grant money, which mandates the use of virus protection on all computers connected in the outlying areas. A virus update server was installed in the Jefferson City office that pushes the virus updates to the computers in the counties.

- Over the past year the DHSS help desk has fielded and resolved 44,529 work orders to assist users with computers. This includes 21,999 calls in the local county government Health offices, private providers, schools and Senior Services county offices. The Central Office, Districts, Area and Region offices generated 22,530 help desk calls.

- HIPAA standards were set for DHSS laptops. This configuration minimizes the risk of personal health data being exposed beyond DHSS employees. Now that the standards have been set, DHSS will continue to replace, upgrade and implement laptops that provide more security.

- DHSS migrated its Sexually Transmitted Disease database into a state-of-the-art system. This allows users of the system to view and enter data statewide. This increases end user productivity and provides for a safer Missouri.

- The Missouri Department of Health and Senior Services have a library of over 300 licensed software titles. The software support unit, in conjunction with our Division of Administration's Internal Audit team, has completed a 100% inventory on all installed software to assure the department is within its licensing requirements. Software installation tools have been placed on the DHSS network to automatically install and audit software. Other measures have been placed in

department policy as directed by the Office of Information Technology to ensure the department stays within its licensing agreements with software vendors.

- DHSS has developed and implemented the ASAP (Automated Security Access Processing) application to assist users with getting access to various systems within DHSS and other state agencies. ASAP being a web-based system allows a new user to complete demographic information and expedite a request for network and applications located throughout the DHSS enterprise. This system drastically improves the amount of time needed for a new employee to become productive.

- Continued support of bio-terrorism activities within DHSS, the Health Alert Network and the Local officials has continued during 2004. CDC requirements provided funding to staff a 24 X 7 computer operations group and help desk.

Planned Projects

- DHSS will integrate the Maternal and Child Health Home Visiting application taking advantage of work done on other MOHSAIC applications.

- DHSS Division of Senior Services began in November a 6-month business analysis project that will assess and evaluate 5 different functional areas: Bureau of Senior Programs, Bureau of Home and Community Services, Bureau of Quality Assurance, Central Registry Unit, and the Office of Community Independence. The division is taking a bold step to determine what areas of their business function can be improved through change in processes, technology, and organization in order to get a more global view of the benefits provided through system integration and database redesign.

- DHSS will be developing a system to print Homebirth certificates on-line.

- DHSS will provide analysis for rewriting the birth and death systems on the Web.

- DHSS will develop a Death Query System.

- DHSS will be looking to utilize MOBIUS software to convert existing printed reports to an electronic media in order to improve distribution, productivity, and reduce costs.

- DHSS is working on Phase II of the Senior Services Technology Pilot that will provide a web-based data entry application to the Central Registry Unit (CRU). This will be a more user-friendly and all-inclusive application to collect initial hotline data for assignment to a caseworker for investigation. The web-based system will have the ability to interface with the legacy mainframe system (Central Registry for the Abused/Neglected/Exploited Elderly – CRANE); this will eliminate duplicate data entry by the staff.

- DHSS is working to implement a new process for Fiscal-Year-to-Date (FYTD) budget reporting. This project will automate the production of several reports to be used in determining budget decision items for the State Legislature and answer fiscal note-type questions during the meeting of the General Assembly.

- DHSS continues to work with the Department of Social Services to convert the current Interactive Voice Response (IVR) system from analog to digital. The analog system is nearly obsolete. The new digital system will provide better maintainability/management, as well as, a better product to the customer. Central Nurses' Registry and the Employee Disqualification List are also looking to make minor enhancements to their current IVR applications.

- DHSS will be working with the Department of Social Services as they convert the Common Client database from IDMS to DB2. The Senior Services computer applications will need to replace all hard-coded calls to Common Client database with subroutines (this will impact nearly 80 programs).

- DHSS is working on a system for Office of Community Independence that will track and identify individuals that can be removed from Long Term Care. This system will maintain a directory of beneficial resources within the community. Assessment tracking and follow-up through nursing staff will help to identify and remove barriers for these individuals.

- DHSS customers and new members of the implementation team suggested several enhancements to the 1st phase portion of the HCS Provider Database system. These suggestions would increase system performance and productivity, and are required prior to proceeding with the Phase-II enhancements.

- DHSS proposes to provide a web interface to the Health Professional Incentive Program. This is the universal application for nursing and Primo student loans.

- DHSS intends to implement a Warehouse Information Management system to track equipment (forms and film) arriving and leaving the warehouse. The proposed plan includes the use of handheld barcode scanners and software that will interface with existing applications.

- DHSS will convert all WIC-related reports not required to be on paper to MOBIUS or another venue that allows online viewing thereby eliminating the need for hard copy.

- DHSS will make changes to the WIC system required to implement new Racial/Ethnic reporting requirements mandated by the USDA/Food and Nutrition Service (FNS).

- DHSS will enhance WIC Direct Entry capabilities to further minimize the need for paper by providing the capability of online print of participant certification data one time at the end of the certification process.

- DHSS will enhance the WIC Food Package system to allow the inclusion of non-contract and special infant formulas on checks to participants.

- DHSS will continue to enhance the WIC system to provide a more thorough, accurate and automated nutritional risk assessment.

- DHSS will pilot electronic communication with other state public health agencies using the Public Health Information Network Messaging System (PHIN-MS) to exchange data concerning interstate surveillance reports.

- DHSS will revise existing, and develop new data marts to support improved decision support of surveillance data including data for emergency response.

- DHSS will implement a new firewall solution to provide increased security and VPN for remote access.

- A complete router replacement for remaining DHSS remote sites will be accomplished to provide better communications for all sites.

- Upgrade mobile communication capability for the Mobile Command Center to be used in disease surveillance and bio-terrorism response issues.

- Upgrade and replace existing network 10/100 Mbit hubs to 100 Mbit switches. This will provide better management of available bandwidth and communications needs for all customers.

- Develop the infrastructure necessary to provide secure email capability with external DHSS partners/customers. This will provide increased communication and data sharing capabilities.

- Migration of the Blackberry project from pilot phase to production phase. This will increase user base and apply to application specific areas to respond to customer demand.

- DHSS will implement a SpyWare protection system in 2005. This will reduce the number of browser-based attacks of DHSS systems.

- OIS will be implementing Microsoft's WUS (workstation updating system) to allow the latest updates on all computers within the enterprise.

- Microsoft Office 2003 will be deployed to all DHSS employees in the Spring of 2005. Along with the upgrading of Microsoft Office, DHSS will eradicate all Windows 95, 98 and NT operating system based computers.

- To comply with CDC grants, DHSS will implement a Blackberry system among senior level officials. The system was piloted in 2004 and will allow the

Emergency Notification System and the DHSS DSR (Disaster Situation Room) to be in contact with officials 24 hours a day.

Accumulated Demand

- DHSS is continually challenged by the mobile computer. User's have the desire to input data in the field environment into PDAs, laptops and other devices to later be integrated and retrieved by existing transactional systems. Funding, lack of staff, and network throughput make this one of the most challenging projects facing the DHSS IT community.

General Department Profile (2004)

Department Name		
Department of Health and Senior Services		

Street Address	City	Zip
912 Wildwood	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
573-751-6001	*573-751-6041*	www.dhss.mo.gov

Department Director
Richard C. Dunn, Director

Number of FTE (entire department)	Approximate number of citizens served
2,200	*5,000,000*

Agency Mission (brief statement)
The Department of Health and Senior Services protects and promotes quality of life and health for all Missourians by developing and implementing programs and systems that provide information and education, effective regulation and oversight, quality services, and surveillance of diseases and conditions. We use strategic leadership and partnership, while promoting community participation in programs and systems, in order to accomplish outcomes and objectives.

Department CIO and IT Division Profile (2004)

Department Name		
Department of Health and Senior Services		
Department CIO Name		
Scott Willett		

Street Address	City	Zip
920 Wildwood	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-6450	*573-526-7645*	scott.willett@dhss.mo.gov

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
National Association of Public Health Information Technology NAPHIT *NASCIO Architecture Working Group*

IT Division Name	Website URL
Center for Health Information Management & Evaluation	www.dhss.mo.gov

Number IT FTE (located in central office)	Number IT FTE (located in field)
122	*7*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$7,689,688 (Only Core Request)	*$7,689,688*

Security Officer Name	Phone No.	E-mail
Gail Morris	*573-751-6450*	gail.morris@dhss.mo.gov
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Jim Branson	*573-751-6450*	jim.branson@dhss.mo.gov
SDC Steering Committee Rep Name	Phone No.	E-mail
Faye Zumwalt	*573-751-6450*	faye.zumwalt@dhss.mo.gov

Department Technology Profile (2004)

Department Name	
Department of Health and Senior Services	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*0*
PC Servers	*54 Windows Servers, 49 Netware Servers*
Mid-range	*32 UNIX/RS/6000's*
Networked	*All*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP, 2000+, 98*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, IPX, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Mimesweeper, Mailsweeper, Norton Anti-virus*
Desktop	*Norton Anti-virus*
Internet	*Checkpoint, Cisco PIX Firewall, Cisco VPN,*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, MS Access	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
.NET, Visual Basic, COBOL, CICS, Delphi	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Groupwise	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
MKS Source Integrity Enterprise
Telecommunications (T1, Frame Relay, etc.)
Frame Relay, Point-to-Point, MAN, Wireless
GIS (ArcView, MapInfo)
Archview, ArchIMS, Network Analyse, Spatial Analyse, Sagent Geocoder, US Streetmap, ArchPAD, Trimble GPS, Teletype GIS, Archinfo

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Department of Higher Education

Preface

The Department of Higher Education handles most IT projects from its core operating budget, which includes state general revenue, federal funds, and funding resulting from the administration of the Federal Family Education Loan Program (FFELP).

The Department of Higher Education also coordinates the development of and recommends a consolidated budget request for the state's system of higher education. An appropriation to the University of Missouri for the Missouri Research and Education Network (MOREnet) is included in this budget request. The MOREnet HB3 appropriation funding provides a reliable, robust and secure shared network and equitable broadband Internet connectivity for Missouri citizens and institutions. Other IT projects supported within this budget include the MOBIUS Common Library Platform and the Missouri Learners' Network (MLN).

MOREnet is a 14-year collaborative effort that operates as a separate unit within the University of Missouri System. It receives planning and budgetary oversight from the MOREnet Council consisting of representatives from the Departments of Elementary and Secondary Education and Higher Education, Secretary of State, State Office of Administration, State Office of Information Technology, higher education institutions, K-12 organizations, and public libraries.

MOREnet links Missouri citizens to a world of knowledge through a statewide, high-speed network. Schools (including both K-12 and higher education institutions), public libraries, and state agencies linked to the MOREnet network have access to a secure broadband Internet connection, staff training, technical support, and electronic resources, making equitable access possible across Missouri.
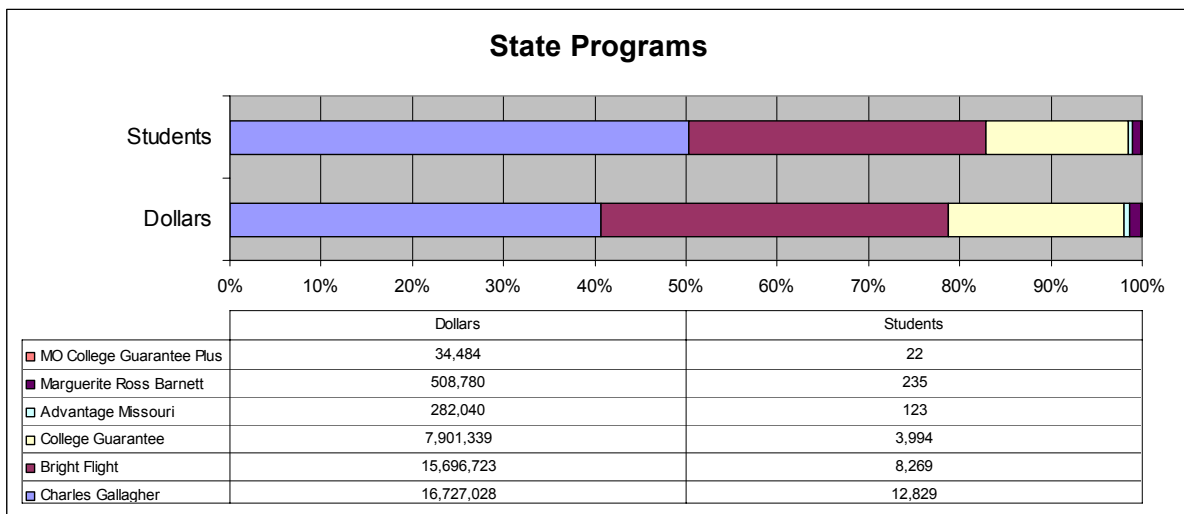
MOREnet is a nationally recognized leader in state networking and manages a statewide shared OC12 network with four OC3 connections to the Internet. It staffs a Network Operations Center (NOC) devoted to managing and operating the state's shared network. The HB3 appropriation provides connectivity and Internet connections for 26 Missouri public higher education institutions (10 Mbps to 120 Mbps), 513 public school districts (1.5 Mbps to 20 Mbps), and two connections to the State Data Center (56 Mbps and 45

Mbps) for state agency Internet access. Forty Missouri independent higher education institutions use the shared network through their membership agreements. Additionally, 226 public libraries connect to the statewide shared network (384Kbps – 10 Mbps) with funding from HB12 through the State Library.

Other IT projects supported within this budget include the MOBIUS Common Library Platform that serves 98 percent of the students enrolled in Missouri's public and independent colleges and universities with free and easy access to more than 18 million volumes of library material and the Missouri Learners' Network (MLN), a Web-based gateway to post-secondary learning opportunities, offered on campus and through a variety of distance learning technologies.

Accomplishments

- In an effort to provide educational opportunities by providing financial assistance:
    - o Facilitated disbursement of over $41.1 million to 25,450 students in the state grant, scholarship, and loan forgiveness programs.

State Programs

	Dollars	Students
☐ MO College Guarantee Plus	34,484	22
■ Marguerite Ross Barnett	508,780	235
☐ Advantage Missouri	282,040	123
☐ College Guarantee	7,901,339	3,994
■ Bright Flight	15,696,723	8,269
☐ Charles Gallagher	16,727,028	12,829

    - o Facilitated disbursement of over $130 million in 76,926 disbursements in the FFEL (Federal Family Education Loan) program through ATOM (Automated Transfer of Money).

- Completed initial development of the State Programs Integration Project, now named FAMOUS (Financial Assistance for MissOuri Undergraduate Students). This system is scheduled for implementation in January 2005. This project has been a complete redesign of the state student financial assistance administrative systems and will:
    - o Integrate application, eligibility, disbursement and reconciliation administrative processes for the major state student financial aid programs.

- Offer students and families the ability to view current and comprehensive financial aid status whenever they want it and update their contact information directly from a web site.
- Streamline the distribution of funds to institutions to improve not only efficiency when dealing with DHE, but also in getting funds out to students.
- Provide high schools with information related to student eligibility.
- Provide a comprehensive system that is available to easily be modified when new programs are established, can easily reflect data to a web site, will require less maintenance for everyday operations, takes advantage of current technology, and is implemented according to the DHE Software Engineering Methodology.

- Provided data in response to requests for various projects intended to identify and improve service to the citizen:
  - Supported Lumina research project by supplying data regarding eligible student and award information.
  - Supported several requests from high schools regarding students' Bright Flight eligibility.
  - Provided information from assessment records in support of College Goal Sunday.
  - Supported administration of state financial assistance programs by providing funding projections.

- Completed development of and deployed the Missouri Department of Higher Education's redesigned web site. The web site was designed based on feedback from the department's various customer groups and their unique needs.

- Completed hundreds of internal improvements and provided support for Department of Higher Education staff to facilitate their ability to provide services to the citizen as efficiently as technology will allow.

- Assisted conversion efforts of the Missouri Student Loan Group to a new servicer. This included the phase-out of the ATOM system that was built and maintained in-house as staff has begun utilizing the new servicer's system. The new contract provides a flexible, state-of-the-art loan processing system that is capable of providing full system functionality via the Internet. This is expected to increase customer satisfaction and provide external clients with up-to-the-minute information.

- Established some IT performance measures along with action plans to begin collecting data to assist us in determining how well the agency's IT investment enables the business units to accomplish their primary missions and where to most efficiently utilize our resources.

- Developed and implemented an intranet site for the MDHE staff to use as an internal communication tool and information resource.

- Continued training IT staff in new technologies to benefit the agency and ultimately the customer with better IT systems.

Planned Projects

- Plan to implement, support, and enhance the new FAMOUS system noted above.

- Plan to continue providing support to the current state financial assistance programs through June 2005.

- Plan to determine feasibility, project requirements, and scope for the following:
    o Internal budget system to interface with SAM II
    o Data warehouse of state financial assistance data
    o Potential integration of other aid programs into FAMOUS
    o Access to historical data in the ATOM (Automated Transfer Of Money) system

- Plan to continue to provide guidance and support for various hardware, software, and IT training needs.

- Plan to continue work toward implementing recommendations from the report on departmental use of information technology from 2003.

- Plan to review, evaluate, and enhance work on IT performance measures.

Accumulated Demand
- There is an unmet need for business continuity/disaster recovery planning for the agency.

General Department Profile (2004)

Department Name
Department of Higher Education

Street Address	City	Zip
3515 Amazonas Drive	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
573-751-2361	*573-751-6635*	*www.dhe.mo.gov*

Department Director
Dr. Greg Fitch, Commissioner of Higher Education (effective January 2005)

Number of FTE (entire department)	Approximate number of citizens served
89.73	*500,000*

Agency Mission (brief statement)
The mission of the Coordinating Board and Missouri Department of Higher Education is "to deliver an affordable, quality, coordinated postsecondary education system and increase successful participation, benefiting all Missourians.

Department CIO and IT Division Profile (2004)

Department Name		
Department of Higher Education		

Department CIO Name		
Gina Hodge		

Street Address	City	Zip
3515 Amazonas Drive	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-1583	*573-751-6635*	*Gina.Hodge@dhe.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
N/A

IT Division Name	Website URL
Information Technology	*www.dhe.mo.gov*

Number IT FTE (located in central office)	Number IT FTE (located in field)
13	*0*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Ted Suess	*573-522-1910*	*Ted.Suess@dhe.mo.gov*

Privacy Officer Name	Phone No.	E-mail
N/A		

ITAB Alternate Name	Phone No.	E-mail
Ted Suess	*573-522-1910*	*Ted.Suess@dhe.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail
N/A		

Department Technology Profile (2004)

Department Name	
Department of Higher Education	

Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)

Mainframe	*N/A*
PC Servers	*IBM Xseries with Windows 2000; Compaq with NetWare 5.1; Compaq with Windows NT*
Mid-range	*AS/400 model 500 with OS/400; AS/400 model 170 with OS/400*
Networked	*N/A*

Desktop (Windows XP, 3270, Linux, etc.)

PC	*Windows XP, Windows 2000, Windows 98*
Dumb terminal	*N/A*

Network Protocols (TCP/IP, SNA, IPX, etc.)

TCP/IP, SNA

Internet Connections (DSL, Cable, Dialup, etc.)

MAN connection

Internet Service Provider (MORENET, AOL, etc.)

MOREnet

Security Provisions (packages, anti-virus, filters)

Network	*Symantec/Norton Anti-Virus*
Desktop	*Symantec/Norton Anti-Virus*
Internet	*OA Firewall*

Help Desk Packages (Magic, GWI)

N/A

Database Management Systems (DB2, Oracle, SQL, etc.)

DB2, SQL for imaging

Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)

WebSphere, Java, COBOL

E-Mail Packages (Exchange, Lotus Notes, etc.)

Exchange

Encryption Packages (SSL, PGP, etc.)

SSL, PGP

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	
CVS	
Telecommunications (T1, Frame Relay, etc.)	
Fractional T1	
GIS (ArcView, MapInfo)	
N/A	

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Missouri State Highway Patrol

Accomplishments

Deaths in Custody

To comply with Federal requirements of the Deaths in Custody Reporting Act (DICRA) of 2000 (Public Law 106-297), the MSHP Statistical Analysis Center implemented a process for Missouri law enforcement agencies to report data on deaths of persons in their custody. The definition of reportable deaths under this Act is: A death of an arrested person or an intended arrestee that occurs during the process of arrest, in the custody of law enforcement officers, or as the result of lethal force by officers. This reporting system is intended to complement another federal system that requires reporting on persons who die during incarceration, either in jails or prisons.

Several processing methods were researched to best implement DICRA statewide. Missouri law enforcement agencies were notified of the reporting requirement in a letter describing the Act, under the signature of the Director, Department of Public Safety. Electronic copies of the Deaths in Custody forms were made available on the MSHP website. Missouri Deaths in Custody data are reported to MSHP via these forms that are completed and sent to ISD. These data are then compiled quarterly and forwarded to the US Department of Justice, Bureau of Justice Statistics. In 2003, 164 Missouri law enforcement agencies reported to ISD. Because this process relies on self-reporting by Missouri law enforcement agencies, the MSHP is expanding its involvement to identify deaths in the state not voluntarily reported.

Drivers Exam Web Focus Reports

A series of Web Focus reports were implemented for the MSHP Drivers Examination Division (DED) to replace existing computer printouts. With these reports, DED users can run division statistics describing driver exam test results by month, test type, Troop, and output format as needed. Access to the reports is provided through the MSHP Managed Report Environment. Additional reports are under development to include graphs and automatic distribution to Troop users with Report Caster.

STARS/ Traffic Management System Web Focus Reports

To meet a MHSP Troop requirement, a set of Web Focus reports are under development to describe crash activity by Troop, county, month/year, crash severity, personal injury, and alcohol involvement. Once implemented, these reports will provide Troop personnel the ability to run statistical reports with control over time frame, geographic area, report type, and output format. These reports will be used to distribute crash statistics for public information purposes.

Missouri Incident Based Reporting System

This federally funded project provides county, local, and state law enforcement agencies a central crime incident data repository that can be used for police administrative and tactical needs. The Missouri Incident Based Reporting System (MIBRS) represents a transition from a crime summary based system of limited use to a richer incident based crime data system. Development of MIBRS was originally initiated to follow the National Incident Based Reporting System (NIBRS). However, the FBI's focus has moved from NIBRS to an information sharing system known as N-Dex. The development of MIBRS has transitioned also to a crime information sharing system in line with N-Dex. The conceptual designs of MIBRS reporting applications and repository were developed in 2003 during Phase I of the project. Phase II MIBRS was initiated in 2004 and implementation is anticipated in 2005.

Substantial progress has been made during Phase II of the Missouri Incident Based Reporting System (MIBRS). An MS Access based incident based reporting system (MRMS) was developed that provides users the capability to locally record crime incident data and electronically upload to the State's MIBRS repository. Development was completed of a WebSphere upload interface that transfers data from flat files extracted from the MRMS or other agency's record management systems (RMS) to a common storage folder for batch processing to the MIBRS repository. Development also was completed of a batch program to move data from email attachments sent from local users to the common storage folder for batch processing. SAS batch jobs were created to move local data sent to the MIBRS storage folder to the MIBRS repository and to the federal. Design of several data interfaces was completed that allows electronic data aggregation/population to other state and federal data repositories, including the Missouri UCR Summary data repository, Missouri DWI Tracking System (DWITS) repository, the Missouri State Highway Patrol's Arrest, Incident, and Investigation (MAII) repository, and the FBI's N-Dex initiative. Compliancy testing with the FBI's NIBRS is in progress.

The MSHP designed several tactical MIBRS searches accessible by Missouri law enforcement agencies via the Internet to proactively solve and prevent crimes. In its development of MIBRS, the MIBRS team added a substantial number of elements to the NIBRS core elements that provide valuable information about persons and vehicles involved in crime incidents. With these data, sharing of crime incident data across law enforcement jurisdictions is significantly increased and allows real time queries in an understandable format. The added MIBRS elements will be queried through a search engine residing in the MSHP / ISD WebSphere environment. In addition, the statistical research capability of MIBRS will be retained. WebFocus input / parameter screens,

search output formats, and statistical reports were defined as were tactical query input parameter screens including quick search person and vehicle screens, advanced search offender/suspect screen, and arrestee, victim, witness, vehicle, offense, and property screens. Definition of 15 MIBRS statistical reports also was completed that describe victim/offender relationships, murder, domestic violence and child abuse victims, offender/arrestee demographics and perceived alcohol/drug use and weapon use, and incident characteristics. Development of these reports is currently in progress.

DWI Tracking System Phase II

Development of the DWI Tracking System (DWITS) was nearly completed by the MSHP in 2004 and implementation is expected in January 2005. This system replaces the Traffic Arrest System (TAS) and the Alcohol/Drug Offender Records System (ADORS) at the Highway Patrol. DWITS improves data integrity of Missouri DWI information and the collection of DWI case information on alcohol/drug driving and traffic related offenses from arrest through final disposition. Currently, DWI arrest information is not captured in any single repository and DWITS will consolidate the information into a single repository. This system can be used to track Driving While Intoxicated (DWI) offenses through their full life cycles from arrest to disposition and identify habitual DWI offenders for prosecution under existing DWI charge enhancers. DWITS also can be used for conducting baseline, geographic, or demographic DWI analyses that can lead to receipt of available federal funds and for statistical analyses of repeat offenders.

DWITS is a secure WebSphere solution deployed for both Intranet and Internet use to affiliated state and local users. An on-line website provides users with data entry interface and consists of two components: UC/DWI online login/user registration module, and UC/DWI online menu based module. Completed in Phase II was the design and development of the DWI Tracking System (DWITS) application, including the data repository, repository data modules, all associated data input interfaces, security, auditing functions, messaging functions, on-line help, data conversion, testing, known output reporting, and user training. The DWITS is comprised of five data components: an administration/maintenance module, data module, error data module, history data module, and audit module. Six data interfaces were developed, including local law enforcement, MSHP, Missouri Office of Prosecution Services, Office of State Courts Administrator, Department Of Revenue, and Department of Mental Health. The DWITS database is DB2 based and a comprehensive data dictionary showing data element names, formats, validation rules, maintenance, data stores, outputs, aliases, and descriptions were documented.

Uniform Crime Reporting Enhancements

Significant modifications and enhancements were completed to the Missouri UCR Repository and its data collection interfaces. To improve performance and increase data quality, several changes were implemented on the UCR Web site, internal quality control programs, and the interface to the federal repository. Also, Lotus Enterprise Integrator batch and replication jobs were modified to better move data reported on the UCR Web site to the repository. The Notes database populated with data from the UCR Web site was modified to archive previous years' data and to contain only two years of data,

increasing its performance. Maintenance jobs used to populate the UCR DB2 repository were modified for reporting of law enforcement officer killed/assaulted, supplemental homicide, and law enforcement employment data.

Recruiting Commercial Vehicle Officers Selection System
A Lotus Notes project was developed to track the CVO selection process, similar to an existing (Member Selection) process. Each "class" is represented by a separate database, in the same manner as Member Selection is accomplished. It was accomplished by copying the Personnel application, making necessary customization, and removing much of the functionality not required. It was correctly estimated this solution would require less than 80 hours of effort.

School Bus Inspection System Rewrite
MSHP rewrote the School Bus Inspection System, which was using the AS400 for data entry for inspections, re-inspections, district addresses, inspection scheduling, and maintaining district code files. This information was remotely entered to a tape. Several reports then ran after downloads and the school bus letters were generated using JCL that accessed the tape and generated several focus programs on the mainframe. Lotus Notes was a good candidate for the rewrite of this system as it kept data more organized in a central location and provided a user-friendly environment. Changes were made without transferring data from one platform to the other.

Accept Multiple Incidents
Made the necessary changes to accept multiple Incident Numbers to be used on the SHP37 Officer Activity forms.

Notes Bar Code Generation System
Developed a Lotus Notes database to address the Patrol's bar coding needs. This application generates the appropriate bar code numbers and prints bar code labels. The necessary number generation routines and views were developed in Notes, and the application utilizes the Label Maker Express software to print the bar code labels. The Criminal Records and Identification Division and the Traffic Division use it for their bar codes. Eventually, the Crime Laboratory Division will utilize this Lotus Notes database. Upon implementation, the AS400 bar coding programs were retired.

Personnel Order Migration
Human Resources Division requested a project be initiated to migrate the Personnel Orders and associated Human Resources Division processes from the AS/400 process and migrate them into the existing HRD Lotus Notes Enterprise System.

Criminal History Records System Initial Post-Implementation Project
Completed CHRS Post-Implementation Activities to complete Post Implementation Tasks for the Criminal History Record System. Tasks included:
- Complete System Test for Interfaces and "Hold" Files
- Address System "Changes" Identified During the Initial Project

- Coded Additional Priority 2, 3, and 4 FOCUS and WebFOCUS Reports
- Conducted a Transition Code Walk-Through with the entire project team

Post Implementation Support for Criminal History Records System
Primary scope for this Project included:
- Miscellaneous Bug Fixes and Contractual Change Control
- CHRS / AFIS Interface
- Firearm Flag Enhancements
- CHRS / Courts Interface (Through Initial Implementation)

Conversion of Personnel File - Orders System History
HRD wanted to close out all personnel files when an employee is separated. Also, requests are received from employees for a complete record of their training and the Patrol had been forced to check both systems for a complete record.

Research Notes Automated Timesheet
The Public Defender's Office requested ISD to research a Lotus Notes-based Automated Timesheet Database. This application was considered as a possible replacement to the Lotus 1-2-3 Spreadsheet application then in use. It was determined this application was feasible, and it could be implemented in conjunction with a decision to migrate the Patrol's 28-Day schedule employees to a 7-Day or 14-Day schedule.

Internal Affairs Report Enhancement
Internal affairs requested enhancements to the Internal Affairs System, and for it to be implemented by April 1, 2004.
- Four-month report
  - Changed the criteria on the selection of Use of Force to check for 2 instead of 3 as in the past 12 month report
  - The complaint wad adding the Use of Force as a complaint but should not be added in the category as complains only by itself
  - Changed Use of Force criteria from 5 to 3
  - Changed complaints criteria from 4 to 2
  - Changed the Number Counts views for Civilian and Member to not show multiple names; only show individuals.

Created an agent for records that were dated for the year 2002 and before to delete employee names, appointment dates, anniversary dates, or any information that was brought over when selecting the employee information from for those cases that had a status of RESOLVED. This was a one time run only.

SAM II Outstanding Tasks
A project was initiated to address SAM II related activities, which remained, unresolved following Phase I and Phase II implementations of SAM II. Activities included: Time Accounting Interface, Base Financial Data Warehouse and Reporting Module, HR/Payroll Priority 3 Reports, Inventory System Data Conversion & Interface, and a SAM II Documentation Database.

MULES Training Extract for New Testing System
The Communications Division requested extraction of a new testing system from the MULES Training and Certification System. The Communications Division was in the process of implementing an online testing system for MULES Re-certification. The commercial company supplying the software requested several items from the Patrol to enable them to configure the system. The items requested were in MS Access, Excel or comma delimited format (Excel was the preferred option).

Quality Assurance Access
The Communications Division requested ISD to design appropriate MULES Training and Certification System procedures which allow Communications Division Staff access to information on converted training records so they can make informed decisions regarding the reduction of access to users related to training and re-certification. This project removed the dependency upon ISD to perform daily quality assurance on the Communication Division's MULES Training and Certification System.

Hotline Tracking Database Enhancement
The Division of Drug and Crime Control requested enhancements to the DDCC Hotline Tracking Database. Request was for delete Lookup for officers because many of the officers are Task Force Officers.

Combine DWI & BAC for Reporting Purposes
A request was made to combine Drinking While Intoxicated and Blood Alcohol Content into one category.

SHP-325 Reports of Arrest-Interim Reporting Process
Field Operations requested an Interim Reporting Process for SHP-325 Reports of Arrest to accommodate Officer Activity Reporting during the Post-Statewide DWI Program Implementation and prior to completion of the Arrest Incident application. In the past, SHP-325 Reports of Arrest were entered into TAS/ADORS (in addition to the Special Investigations System) for the purpose of Statistical and Management Reporting. This "duplication" was not being migrated to the Statewide DWI application, and these Criminal reports of Arrest will ultimately be tracked and reported from the CI20 application.

Modify backward paging in VIN/Salvage System
Motor Vehicle Inspection Division requested backward paging for the name inquiry (NAME), salvage inquiry (SINQ), and owner inquiry (OINQ). A new field to capture business name and a new inquiry by business name was also added.

Automated Records of Conviction from OSCA
Traffic Division requested a project be initiated to accept automated records of conviction from the Office of State Courts Administrator for all JIS Circuits. Work with OSCA and Department of Revenue to finalize the electronic submission of these records.

Criminal History Record System Report Development Module

A project was initiated to complete development and implementation of the remaining identified Criminal History Record System Reports still pending from the rewrite of the CHRS system.

MULES Training Extract for New Testing System

The Communications Division requested a project be initiated to implement a new testing system which feeds the MULES Training, and Certification System. The Communications Division was in the process of implementing an online testing system for MULES Re-certification. The commercial company supplying the software requested several items from the Patrol to enable them to configure the system. The items requested were in MS Access, Excel or comma delimited format (Excel was the preferred option). It was desirable to have this file by August 1 and the QA reports ASAP thereafter. Deliverables included:

- Extracted file(s) in Excel format, included the following information:
  - Agency Information-ORI, Agency Name, Terminal Agency Coordinator Last Name, First Name, Address (optional), and Phone Number (optional)
  - User Information-Last Name, First Name, SSN, Training Level, ORI, Training Due Date, and MULES User ID
- Agency information quality control report - FOCUS Report to be executed from HP65 Parameter Screen
  - Compare DC40 to HP65 by ORI and NAME. Show all records that don't match and the file they came from. List ORI, Agency Name, Terminal Agency Coordinator Full Name, Address, Phone Number.

Hotline Tracking Database Enhancement

The Division of Drug and Crime Control requested a project be initiated to address significant enhancements to the DDCC Hotline Tracking Database. This application tracks Methamphetamine and Marijuana hotline calls, and triggers workflow to appropriate staff to follow-up on the call. A number of additional data elements were added and workflow was adjusted between the Field Operations Bureau, Division of Drug and Crime Control, and Patrol Troop locations.

Automated Records of Conviction from Office of State Courts Administrator

Traffic Division requested a project be initiated to accept automated records of conviction from the Office of State Courts Administrator for all JIS Circuits. Work with OSCA and Department of Revenue to finalize the electronic submission of these records.

SAM II Fixed Asset Report

A project was initiated to develop a SAM II Fixed Asset Report. The Office of Administration had developed a fixed assets reconciliation report that was very beneficial to the Patrol. It compared the fixed assets value in the general ledger with the fixed assets value in the Sam II system, by fund and asset type, and would identify discrepancies on a timely basis that we could then take action to correct.

Commercial Vehicle Officers Applicant System

A project was initiated to develop a system for tracking the Commercial Vehicle Officers selection process. A separate database was needed for disqualified CVO applicants, a 6th CVO class database, and an All CVO Classes database was established.

Academy Notes Post-Implementation

A project was initiated to support the rollout of Academy Notes application workflow and reports to the Patrol's Troops and Divisions.

Property Control Inventory System

The system is Lotus Notes-based and includes an interface to a Laboratory inventory management system, and a bar-coding module to facilitate immediate location of evidence and property, and assist in evidence inventory.

Implemented Terminal Configuration and ORI Component

ISD Management requested a project to complete, test, and implement Terminal Installation and Configuration System and ORI component, which replaced the old Terminal Installation Module. Once implemented, the old system is now available for inquiry only. The new Terminal Installation and Configuration System will automatically keep the old module up to date. The old module will be needed until all current code that uses it is replaced to use Terminal Installation and Configuration System and ORI Component.

Model (MODL) Update

This project was initiated to update the MODL (DENNIS WHAT DOES MODL RELATE TO?) tables with the new values as defined in the documentation sent from Department of Revenue. These changes affected issuance Restriction codes and Violation descriptions.

MULES 3/CAD Interface Specifications

This project required design and documentation of specifications allowing outside agencies to interface their 'Computer Aided Dispatching' (CAD) systems to MULES for the purpose of doing "hot" MULES inquiries and possibly maintenance. Standard record formats and procedures were developed and provided to requesting agencies.

Department Of Revenue (DOR) DLI2 transaction through MCD

This project was initiated to allow a MSHP road officer with a Mobile Computing Device (MCD) to submit a DOR DLI2 transaction. This transaction is transmitted through the MULES system to DOR and then returns a Drivers License Image on the individual it was submitted for. The image along with the text of the response is then displayed on the officers MCD. This image query was also made available for selected MULES workstations. This project included programming in the MULES system as well as the MCD client and/or MULES workstation. DOR has completed all the necessary programming for this application and has it running in a production environment with St. Louis REJIS.

Stolen Vehicle License Plate Retention
Patrol Criminal Justice Information Systems (CJIS) programmers made necessary changes in MULES to allow license plate data to remain in a stolen vehicle record for the year of entry plus 4 years. This update was made so the State of Missouri has the same edits as the FBI's National Crime Information Center.

DNA Criminal Justice Information Systems (CJIS)/FBI's National Crime Information Center (NCIC) Technical and Operational Update (TOU) 03-1 2.3
This update involved the addition of DNA profile indicator and DNA location fields in the NCIC 2000 person files.

Criminal Justice Information Systems (CJIS)/FBI's National Crime Information Center (NCIC) Technical and Operational Update (TOU) 03-01 2.5
Update required converting FBI's NCIC and the National Law Enforcement Telecommunications Systems (NLETS) direct inquiries in MULES 3. Screens needed to be created to allow the inquiries.

Criminal Justice Information Systems (CJIS)/FBI's National Crime Information Center (NCIC) Technical and Operational Update (TOU) 03-01 2.6
Update required modifications of the dental codes and matching algorithm for the missing and unidentified person files, addition of dental codes to the wanted person file, and creation of dental matching algorithm between the wanted person and the unidentified person files.

Criminal Justice Information Systems (CJIS)/FBI's National Crime Information Center (NCIC) Technical and Operational Update (TOU) 3.1 2.4
Update required change of wording in protection order conditions (POC) code 06 and addition of PCO code 09 in the protection order file (POF).

Liquor Control Eliminating Obsolete Products
Required Liquor Control Price Posting Report (LC03) eliminating obsolete products: Liquor Control requested jobs be scheduled to run daily to eliminate obsolete product. The CJIS unit used the current date for "date of last activity".

License Plate Transaction Security Module
Due to a problem with security for Cool:gen being done on the Cool:gen transaction and not the real MULES transaction, when several transactions went to the same screen the proper security was not being done. There were several License Plate transactions (EL8 and EL6) that were restricted to specific.

Protection Order Module for Brady Flag

Information Systems Division, Criminal Records, and the Communications Division held a discovery meeting to discuss Protection Order entries going into NCIC. It was agreed that due to the large number of Brady Indicator errors, a project needed to be initiated. A Customer Service Request for Respondent and Petitioner fields to become required fields as well as some additional coding was to be added by ISD. The Patrol's Access Integrity Unit manually reviewed every full order on a daily basis, and the Communications Division sent out a message to all trainers and users. The Office of State Courts Administrator made associated modifications received through the OSCA interface.

Request to Clear Destination Data

Historically, the Patrol's Communications Division's Radio Log system reports module stored destination codes entered by the terminal operator. While this was beneficial in the short term, it could have caused the Patrol legal problems as some data contained in the record are open for only ten days. It was possible for personnel to alter some of these reports long after the ten-day period and then rebroadcast the report unintentionally. The project used the destination field on all radio log reports be purged ten days after the date of report. Furthermore, these reports were automatically printed on the printer associated with the originating terminal and the related desk printer without the operator having to enter these codes in the appropriate field.

Rewrite Sex Offender System

A project was initiated to rewrite the Missouri's Sex Offender Registry to establish verification tracking and compliance for Chief Law Enforcement Officers (CLEO) and provide a more user-friendly and stable environment. The previous system was only available for Criminal Division use. There had been substantial changes and enhancements requested that caused significant work effort to the current design affecting both front-end and back-end processes.

The current system was developed across two platforms supporting two database technologies that required synchronization. The screen development software had limited functionality. Most editing was done on the back-end causing status messages to be queued and forwarded to a separate view for the user. A user-friendlier screen with real-time editing was desired. There were severe performance problems in the previous system that hindered the Criminal Division's productivity and would be unacceptable for the CLEO's. This project was to research the most productive, supportable design that met Criminal Division and the CLEO's requirements.

Conversion NCIC/NLET Inquiries in MULES 3

The project was to convert NCIC and NLET direct inquiries in MULES 3. Screens needed to be created to allow the inquiries.

Drivers License Trailer Record

The Department of Revenue created a new Driver's License trailer record to accommodate Conceal Carry Weapon information. Communication Division will need to be consulted to

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determine when and how they would like the response to be handled. Application code changes needed to be developed.

Modify MULES Processing for Out of State

Request was received and honored for a modification on how MULES processes Name and OLN queries out-of-state. When a Name, DOB and OLN were queried as one command from MULES to NLETS (i.e. LNM FNM MNI DOB SEX RAC STATE.OLN/XXXXXXXX) two responses should have then been received from NLETS: One for the Name/DOB and one for the OLN. This functionality should be the same as our current in-state MULES queries where two DOR responses are received (one for Name/DOB and one for OLN) when a Name/DOB/OLN query is submitted.

Inventory System Consolidation

Multiple databases are being maintained to track information technology (IT) related inventory. In many cases this involves collecting and maintaining duplicate data in multiple databases, which impacts the quality and accessibility of the data. This project involves the consolidation of this information into one application along with appropriate inquiry and maintenance functions. The benefits of this project are in time saved by eliminating redundancy of data entry and improved access to IT inventory data.

INFRASTRUCTURE PROJECTS

Equipment Upgrades to DELL

ISD replaced 100 450MHZ or lower PC equipment with Dell GX260 small form factor PC's. These installations included converting the user to the MSHP domain and configuring all Lotus Notes to run from the H: Drive. This impacted a few PC's in almost every Patrol division and troop.

Installation/Configuration LANDesk

Information Systems Division Personnel installed and configured LANDesk software on all Mobile Computing Devices. Other updates included WebSphere gateway software, Forms portal, Notes 6, VIN Assist, Spanish tutorial and some Windows updates.

Rollout of 430 Mobile Computing Devices

Configured 430 new Mobile Computing Devices for rollout to troops. Upgraded gateway, installed and configured new Ground Positional System (GPS) server.

Install Zone Computers/Upgrade Mobile Computing Devices

Installed new Zone office computers, upgraded Mobile Computing Devices at each Zone office with new Accident Report and Crash Zone software. Additionally, upgraded all old W98 PC's and performed printer site assessments at each Troop location.

Increased AFIS Latent and Ten-print Throughput

System workload demands increased with the implementation of the AFIS/CHRS interface. To meet the new requirements, additional latent and ten-print matchers were installed and the fingerprint databases redistributed to improve matching capabilities.

The temporary database was also expanded. Throughput numbers increased from 500 ten-print technical searches per day to 800. Latent searches increased from 75 searches per day to 150. The permanent databases were expanded to hold 1.25 million fingerprint records.

APS Voice Software Deployment

Voice software was installed on all previously deployed mobile computing devices (MCD's) and on all new MCD's. This software, designed to help improve officer safety, "reads" the MULES, NLETS, NCIC and DOR responses to an officer query. This allows the officer to keep his focus on the suspect rather than reading responses on the MCD screen. The voice can be muted in the event a suspect is in the patrol car.

FastT

The Enterprise Storage System (ESS) was running low on storage. Due to the cost of expanding that environment, a FastT 900 external storage solution was purchased. This project involved moving over a terabyte of data via the SAN switch from the ESS to the FastT. The FastT initially provides 5 terabytes of storage with the ability to expand in a more cost efficient manner.

CISCO Switch/ Reconfigured SAN

This project upgraded our existing SAN by replacing Brocade switches with a Cisco director class switch. The new switch should provide more flexibility, throughput and expansion capabilities.

Backup Consolidation

As part of this project, we installed and configured new tape libraries. We also set up Amanda (an open source backup program) to perform enterprise-wide backup. This program has saved the Patrol many person hours and consolidated the wide variety of backup methods that had been used. Human intervention is no longer needed to load tapes and backups are completed automated. By consolidating with one backup method, data and system restores can be completed in a more efficient manner.

Notes 6 Upgrade

Moved all Notes applications from Windows to Linux and upgraded to Notes 6.5. E-mail was moved to a separate server to improve performance. The old, out of date Netfinity Notes servers were replaced with new Dell 2.4 servers providing increased processing power. Use of the Linux operating system provides better security and decreases the overall cost of licenses. A number of Notes applications were migrated to Domino 6.5 running on a Linux environment.

Installation of Dell KVM Switches

This project encompassed the purchase, installation and configuration of Dell KVM switches in each of the three server racks in the computer room. These switches allow the system administrators to perform most tasks from their desks rather than in the

computer room. This is a benefit to all Patrol employees needing to reach an administrator for support.

Internet Domain Name Change
The Office of Administration required all state agencies to standardize on domain names by July 2004. This change affected the Patrol's web site, email addresses, and domain name service (DNS).

Internet Security (McAfee FTO Sites)
The initial implementation of McAfee had a single file transfer protocol (ftp) site for the latest anti-virus signature files. It quickly became obvious that a single ftp site could not provide a quick roll out of new signature files in the event of a virus attack. Additional ftp sites were created at each troop headquarters. Scripts were written to update those sites and all clients were modified to point to a local ftp server. Now all clients can be updated in a matter of hours instead of days.

Message Switches and Scheduler Server
With the addition of hundreds of mobile computing devices (MCD's), the Computer Aided Dispatch (CAD) system and its interfaces were reaching maximum performance levels. New message switches (primary and backup interface between the MCD gateway, CAD and MULES) were installed. The 28-day scheduler server was also upgraded. It is used to feed officer schedules to CAD and also acts as the primary domain controller for the MSHP domain.

AS400 & Server Conversion
- Notes email and calendaring replaced the AS400 Office Vision product. To accomplish this, AS400 dumb terminals were replaced with PC's. Lotus Notes was installed on existing PC's. Some existing PC's were upgraded to handle the Notes workload.
- Pembroke utilities were used to convert Office Vision documents to Microsoft Word. Many Patrol employees required extensive PC, Windows Operating System, Microsoft Word and Excel and Lotus Notes training.
- Existing troop servers were upgraded to accommodate the additional workload and converted AS400 documents. New servers were installed with greater processing speeds, memory and more storage capacity. Changes to Microsoft licenses prompted the decision to use Linux for the operating system and other open source code (Samba, VNC, Amanda) as part of the configuration.
- A new, centralized backup solution was implemented allowing documents and folders to be restored to the troop server from GHQ.
- New security methods and procedures were investigated and implemented to provide similar security as the AS400.

Migrate AIX to P650's
Migrated all AIX systems from SP frames and B50 to P650 LPAR technology. Project included upgrades from AIX 4.3.3 to AIX 5.2.

Infrastructure Upgrades for CAD

In order to support the additional workload of the MCD's and to address state-wide "slow down" issues, CAD was moved to a 2 2.4 GHz processor LPAR. Additional DASD was needed and connected via the SAN. The AIX operating system was upgraded to 5.2, and HACMP was upgraded to 4.5. To facilitate web reporting, DB2 was upgraded to 7.2 CAD was also moved to Ethernet.

Replacement for Linux RedHat 7.3

RedHat announced it would no longer be providing maintenance fixes for version 7.3. All existing Linux servers were upgraded.

VMWare Test and Implementation

VMWare is a software product used to create multiple partitions on Intel based servers. Each partition appears to be a separate server as it has its own operating system and can be rebooted independently of the other partitions on the same server. In addition, a VM can be "dragged and dropped" on a different VM server in the event of a hardware problem. This efficient use of servers has proven to be very cost effective. Currently, we have 3 VM servers each running 4-6 partitions, with a fourth VM server being planned for future growth.

Lotus Enterprise Integrator

This project was initiated to "clean-up" the Lotus LEI database. Standard naming conventions were established and applied to both Production and Test LEI jobs and schedules. In addition, the Production and Test databases were evaluated for synchronization, and to ensure they were "synced-up" removing unnecessary jobs from each database.

Lotus Notes Keyword Database Consolidation

A project was initiated to consolidate Lotus Notes shared databases to a single production and test server environment. The Notes Keyword Database was consolidated to exist on both test and production servers. Copies on other servers were removed, with application access altered to utilize the shared database. Analysis was also conducted to determine if other such shared (duplicate) databases exist, and they will be consolidated as well.

ISD Training Tracking System

ISD management requested creation of a copy of the Academies' continuing education system for tracking training activity. Appropriate security access, customization, and documentation updates were included in this project.

Upgrade Vanguard RACF Administration Tool 4.3 to 5.1

The State Data Center was in the process of upgrading VRA from release 4.3 to 5.1. The new release needed to be checked for database changes that required application modifications. Programs creating RACF reports for the Patrol's Access Integrity Unit needed to be modified. They all needed to be tested using the release.

Performance Tuning to Reduce CPU Utilization

This project was initiated to target applications for performance tuning and reduce SDC CPU utilization costs. Recent applications going into production had significantly increased utilization resulting in increased Data Center costs. The most obvious applications were consultant written Cool:Gen applications using DB2 database. The Cool:Gen applications were researched to see if better coding practices could eliminate redundant code, locate bottlenecks, improve paging techniques, and utilize better DB2 access methods, etc. The project included the evaluation of 'STROBE' provided by Compuware, which scanned the Cool:Gen applications to help identify the potential problem areas. IBM utilities and processes were used to configure, monitor utilization and report on trends. IBM's assistance was sought to help in particular performance-tuning areas.

Move MULES to Backup CPU

This project required the Patrol to coordinate with the State Data Center to move MULES to another CPU during extended downtimes. Another region was configured by SDC to bring up MULES and all the required software to support it. Procedures were defined for MSHP and SDC Operational staff to transition MULES over to the backup region when an extended downtime has been determined.

Optimize Region to Configure for CINCOM Partition

Due mainly to Criminal History upgrades, utilization on the Patrol Production region at the Office of Administration's State Data Center steadily increased requiring more CPU Millions of Instructions Per Second (MIPS). Consequently, it was pushing the Patrol over the contractual agreement with the CINCOM vendor to run under a defined MIP capacity. This initiative required researching and segregating software products (SUPRA, CTMS, and Mantis) processing to another region that met the agreement requirements. The implementation entailed leaving Criminal History transactions and database processing on the production region and creating another region for CINCOM (MULES and ACOM) processing. This required programming changes for MULES. The State Data Center needed to provide the new region and all the required software.

MSHP Forms Portal

A Forms Portal application was implemented to facilitate initiation of Patrol Forms, regardless of the source technology behind the form, isolating users from required knowledge of form-driven software. The Forms Portal also facilitates workflow of Officer Field Reports such as Accident Form processing.

Planned Projects

Sex Offender Internet Reporting/Mapping

This project is to design, develop, implement and support a search engine and geographic information system (GIS) accessible through an Internet website that can be used to conduct electronic searches on registered sexual offenders. Once implemented, the

website will comply with SB 184 that requires the MSHP to provide search capabilities by name, zip code, and by mile radius from entered address for sexual offenders. Results of searches will only give sex offender's name, last known street address, city, county, state, zip code, photograph, and convicted crimes.

Enforcement Survey Statistics System Rewrite
A request was submitted for a project to be initiated for a rewrite of the MF-FOCUS-Based CJ94 System to a Lotus Notes-based system that accommodates significant enhancements to the Selective Traffic Enforcement Report SHP-135 form, and facilitate data workflow. Some of the data entry functionality may be combined and/or simplified on the Notes side so that the entry appears closer to the look of the forms. The existing reports will be accomplished through new views. The new system should detail procedures and reports needed for conversion, and other enhancements for the new system, along with security and possible replication out at the troops.

FR Query Client Code Enhancements
A request was submitted for a project to enhance the FR Query Client code resident on MCD devices to address a number of User functionality requests. In addition, the FR Query clients should be enhanced to request and receive Images transmitted from DOR through the MULES network

CAD Reporting Module
A request was submitted by the Communications Division for a project to develop a reporting module for the LogiSys CAD system. ISD will utilize WebFOCUS technology to accommodate this request.

Training Due Date/Reduced Operator
The Communications Division requested a project be initiated to address a number of enhancements to the MULES Training Certification System. Enhancements include: removal of calculation for training due date, certification indicator, and user status; require training due date, certification indicator, and user status; remove the printing of selected messages targeted for Communications Division; add a class roster report; update online help; add a number of workflow keys; and others.

Implement a New Incident Number & Process
The Technical Service Bureau requested a project be initiated to investigate the impact of changing the current number scheme and process for Incident Numbers. The new proposal is to utilize CAD as the number generator, utilize the CFS number format (yy-mmdd-nnnnn), and continue to utilize CP13 to store incident information and link supplemental records. The Communications and Information Systems Divisions will investigate the impact to CAD and other applications currently using the incident number. Options and recommendations will be provided as to a revised approach for assigning incident numbers.

Convicted Offender DNA System

The Laboratory DNA Profiling unit collects DNA samples from convicted offenders. Beginning January 1, 2004, law enforcement agencies will begin collecting DNA for all convicted offenders and submit packets to MSHP for registry into this system.

DNA Convicted Offender/CHRS Interface

The Laboratory DNA Profiling unit collects DNA samples from convicted offenders. They have requested the addition of several fields to the Criminal History Record System and an associated MULES inquiry to indicate whether a DNA sample was collected from a particular individual (similar to the fields already being added to NSOR by the request of NCIC).

NSOR Web Module Performance Enhancements

A project has been requested to take steps necessary to improve the performance of the Front-End NSOR application in an attempt to prepare the application for deployment to the Chief Law Enforcement Officers (CLEO). Following migration of the application from AIX/Domino 5.x to Linux/Domino 6.5, steps for this project include:

- Environment Specific Enhancements & Testing
- Server configuration alterations (bumped memory, etc)
- Recommended Code Changes to address message windows and other "slow" system functions
- Optimization of views & System Indexing, potentially replacing "full text" indexing all together
- Rollout activities for CLEOs (anticipated)

Troop Arrest Card File System

Troop F requested a project be initiated to develop a Notes-based application to accommodate troop arrest contact information currently kept on manual card files. Although the system will initially only be utilized by Troop F, it will be designed to accommodate all troops.

Chevin FleetWave System Implementation

Fleet Management requested a project be initiated to support the acquisition and implementation of the Commercial off-the-shelf software Chevin FleetWave Fleet System. The project will include Environment Configuration, Application Acquisition, Data Conversion, and Interfaces to Office of Administrations Fleet System and FleetOne Fuel System.

SHP-615 Workflow Automation

ISD management requested a project be initiated to build a workflow application to track SHP-615 Network Security Authorization Request forms. All Troops and Divisions will require access. This will require a Notes form accessible via the MSHP Forms Portal.

Accident Form - Electronic Workflow

Traffic Division requested a project be initiated to automate the electronic workflow of the Accident Form from the Mobile Computing Devices, through the approval process, into the Statewide Traffic Accident Reporting System/Traffic Management System, and back if necessary. This project will include workflow definition, testing, implementation and a rollout plan.

Patrol Investigative System of Reporting

A request has been initiated to rewrite the AS/400-based Arrest/Incident/Investigation System to accommodate a new SHP-325 and supplemental reports. The system will also accommodate a number of DDCC source forms, and interface to UCR, MIBRS, DDCC Notes Enterprise, and DWI Tracking System. Officer Productivity reporting interfaces will also be altered as a result of this implementation.

Trooper Selection Program

The Trooper Selection Process will be automated as an Internet-based application utilizing the WebSphere technology. The project includes interfaces to MSHP legacy applications for performing background checks and other selection-related functions. Phases of Trooper Selection will be implemented in 2005, in conjunction with IBM Immersion-based WebSphere training.

Laboratory Information Management System

Implementation of a Patrol-wide LIMS System is planned for 2005. LIMS is a Notes-based case management system that incorporates bar-coding technology and a web-based Lab Analysis Request module to facilitate management of laboratory cases and inventory throughout the Patrol. LIMS will also integrate closely with the Patrol's Property Control Inventory System.

HRD Notes: Troop/Division Rollout Enhancements

Human Resources Division has requested that their Notes Enterprise applications be enhanced to accommodate the rollout of HRD forms, reports and workflow to Patrol Troops and Divisions. This project will facilitate a phased rollout approach to accommodate workflow of all HRD forms and processes.

Crime Victim / Witness Migration to Lotus Notes

Field Operations Bureau has requested that the Crime Victim/Witness application be migrated from an AS/400-based application to Lotus Notes, and accommodate a number of enhancements and changes to the source data form as well as incorporate appropriate workflow.

Gateway Information Sharing Initiative

In 2005 MSHP will continue participation in the Gateway Information Sharing project. Pilot testing will be completed and migration of the system to a new contractor and application base is anticipated in 2005.

PLANNED INFRASTRUCTURE PROJECTS
Security at General Headquarters Complex
A project was implemented for the General Headquarters complex under the Homeland Security Act. Four firms completed their site assessments in early November and submitted bids with scope of work in the November 15, 2004 timeframe. At the end of this phase a contractor will be selected.

The project is to provide security/observation for the complete complex with about 30 external cameras along with 10 internal cameras. Some of the external cameras are honed in on air fresh air intakes, docks, and civilian access points to and on the grounds. The complete security system can be operated and viewed via desktop PC's and have Internet Protocol (IP) based technology. This allows the Patrol the flexibility to authorize specific personnel to monitor specific cameras throughout the complex. The scope of this first phase is to complete the GHQ complex, later on it will blanket the whole state at each Troop location all the while being IP based and accessible by responsible directors and managers.

The possibility of this project saving lives and protecting property is real and viable especially at the troop level. The troop buildings and their communications towers are one of the most vulnerable areas the patrol maintains.

Lotus Notes Application Migration to Domino 6.5
Lotus Notes applications will continue to be migrated to Domino 6.5 and implemented on Linux servers in the optimized Domino Server strategy implemented in 2004.

CINCOM Transition Strategy
A number of applications utilizing the CINCOM technologies of Supra, Mantis, etc. will be converted to alternative technologies in 2005. The MSHP goal is to have all applications migrated out of the CINCOM technology by June 2006.

Uniform Crime Reporting Data Warehouse Migration from SDC
A request has been initiated to migrate the Uniform Crime Reporting (UCR) Data Repository / Data Warehouse files from an MVS/DB2 environment at the State Data Center, to an AIX/DB2 environment at MSHP.

Upgrade Content Manager to V. 8.1
This upgrade requires existing data to be migrated to new database table formats, elimination of the library server component, and allows web clients. We plan to allow remote agency access to Content Manager to ease the workload on the Criminal Records Division.

Upgrade AFIS/GSP to connect to FDR
The FDR (Fingerprint Data Router) is a new piece of equipment, which will be used to route AFIS/CHRS responses, messages, court and prosecutor's information to agencies as required.

Notes E-mail Clustering

This project involves the investigation and implementation of an additional Notes e-mail server for high availability. It will also help to identify other single points of failure in the email environment (i.e. SAN, FastT, id files, etc.).

Replace Netfinity Servers

The remaining four Netfinity servers will be replaced with new, rack mounted Dell servers. This will save maintenance costs and should improve performance.

AS400 Consolidation

The purpose of this project is to move any remaining AS400 applications from the troops to a new I-Series server at GHQ.

McAfee Upgrade

This project will upgrade the virus engines to a newer release. The new ePO server will provide more functionality, security and better reporting facilities.

Accumulated Demand

Mules/3 Missing Persons

This project is to start the development of the Missing Persons component of MULES3. The project includes the planning, design, documentation, development, data conversion, reporting testing, training, and implementation.

MULES/3 Boats

This project is to start the development of the boat component of MULES/3. The project includes the planning, design, documentation, development, data conversion, reporting, testing, training, and implementation of Boats.

MULES/3 Vehicles

This project is to start the development of the Vehicle component of MULES/3. The project includes the planning, design, documentation, development, data conversion, reporting, testing, training, and implementation of Vehicles. This includes Stolen Vehicles; Felony Vehicles; Towed vehicles.

SSN NCIC Technical and Operational Update (TOU) 01-07/2.2

Technical and Operational Update (TOU) 07/2.2 calls for creation of protected person SSN and modification of mandatory fields for entry. This modification to the system will require that a new field be created in the database. Code changes will need to be made to allow for the new field and the appropriate edits be done. Mandatory fields change to allow a respondent to be added without any numeric identifiers if the petitioner name and DOB or SSN is added. Modification to the interface specifications will need to be updated and sent to REJIS and ALERT. This change does not require REJIS/ALERT to

make any changes if they decide to follow the edits as are currently in place this will just allow them to add a respondent without a numeric identifier.

Computer Audit Program Customer Service Requests (CSR)

Until recently, staff inspectors, used the Windows 95 Audit program to determine if improper or unauthorized files were present on zone office or CVE personal computers. With the upgrade of operating systems, Windows 98 and Windows 2000, the current audit program does not function. The main obstacle appears to be a different boot up sequence at the start of the new operating systems. There appears to be no opportunity to obtain a command prompt before the system starts the Windows program. The current audit program will not examine files if it is not started under the command prompt. Attempts to run the program using the DOS prompt in Windows 98 were unsuccessful. Inspectors will need an updated audit program to effectively determine if unauthorized or improper files are present on zone office or CVE personal computers.

Academy Re-certification - Academy Online Registration System

Request to initiate the following project: Development of a web-based module to the Academy re-certification system to allow for non-patrol registrations to be submitted online.

MVS Badge Assignment Module

Request a project be initiated to replace the Personnel System Mainframe Supra Data Structure with a DB2 Database. This project addresses migration of this application to new technology as part of the CINCOM Product Transition Strategy. It is anticipated that the replacement system will be a COOL:Gen module (Component if possible) which will process all MVS application calls to PN10 for Badge Number validation, etc. The new system will not perform CRUD action, as the database is synchronized from the Notes-based personnel system. This project includes development of CP14, PN05 interface to CP14, MVS application routine replacements from PN10 to CP14, and retiring the PN10 database.

Criminal History Pending Interfacing

Criminal Records and Identification Division requested a project be initiated as a placeholder for all remaining Criminal History Significant Tasks. Some tasks may be migrated to a new project (if a new PAQ is initiated)... or possibly worked from within this project. Remaining modules includes:
- CHRS / Custody (OPII) Interface
- CHRS / Prosecutor Interface
- System Documentation / On-line Help

Facilitate MVI Dailies

This project is to provide Troop clerical staff with access to the HP08 AS/400 System for the purpose of entering MVI daily records. MVI will facilitate clearing this through Field Operations Bureau prior to initiation. ISD will also look into the possibility of interfacing HP08 data with SAM II to facilitate automation of leave records in a similar

fashion as Officer Dailies are being interfaced from PN12. If a solution is available, it will be implemented with or after the implementation of SAM II, currently scheduled for February 2001. MVI will also investigate the possibility of having daily records entered into HP86 (later SAM II) directly form the daily form and eliminating the yellow sheets. This is strictly a procedural issue and does not involve ISD.

Charge Codes: Remove UCR/NIBR Codes

A project was requested to remove the UCR/NIBRS code reference from the Code Table. All reference to these codes within the charge code file (and elsewhere within Advantage: Gen applications) will need to be removed prior to dropping the DB2 tables.

Vin & Title Salvage System Rewrite

Request a project be initiated to rewrite the Vin & Title Salvage System. This project addresses migration of this application to new technology as part of the CINCOM Product Transition Strategy. It is anticipated that this will be a Notes application with a Notes or DB2 database.

Officer Activity Data Warehouse Migration from SDC

This project is to migrate the Officer Activity (Racial Profiling Data Repository/Data Warehouse files from an MVS/DB2 environment at the State Data Center to an AIX/DB2 environment at MSHP. The scope of this project encompasses the following:
- Database development on AIX
- Data Migration
- Master and Access File Description Transition
- Copy Job Migration
- FOCUS code Migration
- Testing in the New Environment
- Misc. Related Activities

WebFOCUS Reporting Interface

This project is to design and build a reporting interface to the SHP-37 repository data, accessible by GHQ, Troop and Zone personnel. The reporting interface will include browser-based access to the WebFOCUS Managed Reporting Environment. Project tasks include:
- Conduct Design Sessions with FOB, RDD, and Troop / Zone representatives to identify the desired reports and ad-hoc reporting parameters
- Design & Build the Reports & Parameters Screens
- Deploy the reports in WebFOCUS & make accessible agency-wide, as necessary
- Provide associated documentation and training as necessary
- Project to also include modules for CJ90 & CJ92 (From old AS0025 CSR)

Officer Activity Report MULES Query

The Officer Activity database information could be used by road officers to determine if subjects from the system contacted have been previously stopped, warned, issued a UC, arrested, and/or searched. Information from the system could also indicate if the search

revealed any contraband. The ability to determine the date, time, county, and highway of previous contacts could also be included with name, date of birth, race, and license plate information.

The ability to query Officer Activity should be done through MULES to allow MCD users to access information quickly and at the same time other routine checks are made. Allowing road officers access to Officer Activity information could result in more ownership by road officers in the Activity Report process. I have received positive responses from several road officers when I mentioned the possibility of receiving Activity Report database information during future vehicle stops. DDCC officers have also responded favorably to this idea. The information could be used as intelligence or as corroborative evidence during criminal investigations.

MVS Badge Assignment Module
The Criminal Records and Identification Division is requesting the development of a storage and tracking mechanism in the Criminal History Record System up-grade. Currently, an important segment of statistical data from diskettes processed through ISD and legacy system is not being saved. These diskettes contain requests for criminal record checks from both state agencies and private organizations. The ability to track and disseminate this information will aid in determining manpower and work- flow assessments. Further, its usefulness in providing data is essential to obtain support for the future legislative initiatives of the Patrol pertaining to the improvement of the criminal history record system. These initiatives are not for the sole benefit of the Patrol. They primarily assist those agencies required to conduct criminal record checks or those agencies that contribute criminal history information through the Central Repository.

Display Employee Photo in HR Application
The Patrol has digital photos of all employees and some retirees available to the Human Resources Division. It is requested that the HR Personnel Notes application be modified so that photos can be accessible from the application. When working with an employee's record in the Notes application, a link to that individual's photo is needed. The number of photo's currently existing is less than 3000 and that number will grow gradually as people retire.

Liquor Control Price Posting System Rewrite
It has been requested a project be initiated to rewrite the Liquor Control Price Posting System in an effort to abandon the CINCOM technology. Significant progress was made on this effort during the Y2K transition, utilizing the Gen/DB2 environment. This rewrite has been inactive since October of 1999. This project will coincide with the CINCOM Conversion efforts of ISD.

Automation of MVI Daily Report
The MVI Daily Report, SHP-453, is completed by each of the sixty-three Motor Vehicle Inspectors to account for each day of the year. The information collected on the report is utilized mainly for statistical purposes and as a tool for supervisors to review the daily productivity of their subordinates. These reports are forwarded to GHQ and data entered

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into an AS400 database by clerical staff. The data entry occupies approximately one-half of a full time employee's work time. Additionally, troops with late submissions of these reports create delays in timely and necessary report processing. This form could be developed in a Lotus Notes format, similar to the Officer Activity Report, SHP-37. MVI personnel, making the information real-time rather than delayed reporting of their activities, would make entries at the troop level. Reports could then be generated from the entered information that are not only more timely, but possibly more accurate.

FLSA Time Reporting System Rewrite

A project is requested to rewrite the PN12 FLSA Time Accounting System in an effort to abandon the CINCOM technology and move the application away from the State Data Center. It is anticipated that the redesign would encompass a Lotus Notes Front-End, with a DB2 Repository resident on AIX. The current SAM II Interface would be maintained, in addition to existing necessary functionality. This project will coincide with the CINCOM Conversion efforts of ISD.

Adjusted 03/11/2004: This project needs to also address replacement of the SHP-44 Time and Leave Record, as well as accommodate Member Time Accounting on a 7 or 14-day schedule (as opposed to the current 28-day schedule).

Radio Reports Field Reporting System

Radio Reports Field Reporting System: Request a project be initiated to develop a field reporting application encompassing all of the requirements of the current HP70 Radio Reports. It is anticipated that the application will include OneForm Field Reporting Module, as well as a back-end repository database, possibly Notes or DB2. The HP70 Radio Reports Module should be retired at the completion of this project. This project includes requirements definition through implementation.

Case Assignment Log Incident Type

Request to initiate the following project: Request for additional Incident Type Codes be added to the Division of Drug and Crime Control Narcotic Vice Unit Case Assignment Log. Additional Incident Type codes spacing should be for five (5) characters. New incident type codes: IR-SV for surveillance; IR-IR for investigation reports; IR-AS for assisting other agencies; IR-ID for identifying subjects.

RDD Notes Enterprise

Request a project be initiated to automate manual RDD Processes and Documents, including but not necessarily limited to: General Orders, Statutes, and Attorney General Opinions. This Request is in support of a project initiated by RDD several years earlier. The original project request could not be found.

Revise Test From 60 Days To 365 Days

Request received to revise the minimum time allowed for a Motor Vehicle inspector/mechanic to be given a practical examination, test #500, from 60 days to 365 days. Under the current configuration, the data entry operator is unable to add an

inspector/mechanic that was administered a practical examination more than 60 days after successfully completing a written examination.

Supply Order and Requisition

Request a project be initiated to develop an application to address the supply order and requisition process. The current process includes management of UATs Inventory Manager and Personnel Tracker software, as well as an AS/400 database and associated SHP-92 form. Supply items, quantity, etc. is currently maintained in the Inventory Manager application. Any supplies that can be requisitioned by Patrol entities is "duplicated" in an AS/400 database. Patrol Troops and Divisions then requisition supplies by cutting & pasting information from the AS/400 database to the SHP-92 form. This begins a process of numerous paper flows. Since the AS/400 solution represents a duplication of effort, is awkward to use, and is at risk since Office Vision is no longer supported, an alternate solution is desired. In addition, the UAT software is also "at risk", since the vendor is no longer in existence. The recommended solution is a Lotus Notes based application to replace the AS/400 files and address the requisition process flow. Ultimately, the UAT software functionality would be "consumed" as modules within the Notes application.

Since a data conversion from Access to Notes is required, an initial phase of the project might be to schedule the conversion jobs, build the AS/400 replacement module, and maintain the UAT functionality until a later phase. Another consideration for the UAT module is to consider this in the Patrol's overall Inventory Consolidation project. With this in mind, the two-phase approach to this request may be most desirable. Priority should be considered for this project. It is desirable to conduct a "design session" with BPD staff, and develop a Prototype for review PRIOR to initiation of a full development effort.

WS15 - Water Patrol Arrest Warnings System Rewrite

Request a project be initiated to rewrite the WS10, WS20, and WS30 Systems in an effort to abandon the CINCOM technology. Significant progress was made on this effort during the Y2K transition, utilizing the Gen/DB2 environment. These three applications were integrated into the design of WS15. This rewrite has been inactive since October of 1999. This project will coincide with the CINCOM Conversion efforts of ISD.

ACCUMULATED DEMAND INFRASTRUCTURE PROJECTS

SYSPLEX

This project is to research application, database, and operating system requirements to create a CICSPLEX environment that will allow the processing of CICS transactions and functions to be transferred among other CICS regions at the State Data Center. This would provide the ability to perform software maintenance on CICS regions without an outage. The CICS regions should have the ability to detect certain critical states such as storage problems, heavy workloads, errors, etc. and transfer control to other CICS regions to avoid any interruption of application processing.

Domino Everyplace

Investigate, purchase and implement domino Everyplace to replace the AS400 paging software.

Enhance DC03-Migrate to Notes

This project is to be initiated to enhance the DC03 system to include categories, platform information, etc, to assist in the frequent inquiries relative to applications and support for Performance Measures, etc. It would be desirable to migrate DC03 off of the State Data Center and out of COOL:Gen technology and into Lotus Notes, possibly as a module of the DC05 application.

HP27 Data Warehouse Migration from SDC

This project is to migrate the SAM II Data Warehouse files from an MVS/DB2 environment at the State Data Center, to an AIX/DB2 environment at MSHP. The scope of this project encompasses the following:

- Database development on AIX
- Data Migration
- Master and Access File Description Transition
- Copy Job Migration
- FOCUS code Migration
- Testing in the New Environment
- Misc. Related Activities

Pilot Project to Port COOL:Gen Application

Pilot program to port COOL: Gen application from MVS to AIX: Request a project be initiated to pilot the migration of a Mainframe/MVS based COOL:Gen application to the RS6000/AIX platform. The pilot should include definition and acquisition of any necessary software or tools (such as AIX Implementation Toolset), as well as any tasks necessary to successfully migrate the "pilot application" to the new platform. For this project, the "pilot application" will be the DC03 Application Catalog. CA should be consulted regarding temporary (free) access of any necessary tools to complete this pilot project. The results of this project will be utilized to plan for the potential strategic move of selected COOL:Gen applications from the SDC to the MSHP AIX platform.

Time Reporting/Accounting System Replacement

Investigate alternatives, provide recommendation, obtain approval, and manage implementation for a time/cost accounting system that will interface and integrate with Microsoft Project for the tracking and reporting of ISD time and costs associated with project completion.

Advantage:Gen - CE to CSE Migration

Request a project be initiated to migrate the Advantage:Gen central encyclopedia located on MVS at the State Data Center to a Client-Server Encyclopedia located here at MSHP.

Application Catalog Migration to Lotus Notes

Request a project be initiated to enhance the DC03 system to include categories, platform information, etc, to assist in the frequent inquiries relative to applications and support for Performance Measures, etc. The Application catalog should be migrated into the ISD Standards/Lotus Notes application.

Criminal History Request Tracking System

The Criminal Records and Identification Division is requesting the development of storage and tracking mechanism for the CJ25 System. Tracking includes requests for criminal record checks from both state agencies and private organizations. The ability to track and disseminate this information will aid in determining manpower and work- flow assessments.

General Department Profile (2004)

Department Name
Missouri State Highway Patrol a Division of the Department of Public Safety

Street Address	City	Zip
1510 East Elm Street	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-3313	*(573) 751-9419*	*www.mshp.dps.mo.gov*

Department Director
Colonel Roger D. Stottlemyre, Superintendent

Number of FTE (entire department)	Approximate number of citizens served
2,050 within the Highway Patrol	*Directly or indirectly all.*

Agency Mission (brief statement)
Dedicated to Service and Protection

Department CIO and IT Division Profile (2004)

Department Name		
Missouri State Highway Patrol		

Department CIO Name		
Clifford R. Gronauer		

Street Address	City	Zip
1510 East Elm Street	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 526-6200	*(573) 526-6274*	*clifford.gronauer@mshp.dps.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement *(i.e., NASCIO – serve on architecture standards committee)*

IT Division Name	Website URL
Information Systems Division	*www.mshp.dps.mo.gov*

Number IT FTE (located in central office)	Number IT FTE (located in field)
Eighty-two (82)	*None*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$26,738,090	*$15,154,864*

Security Officer Name	Phone No.	E-mail
Tim Schlueter	*(573)751-3313*	*tim.schlueter@mshp.dps.mo.gov*

Privacy Officer Name	Phone No.	E-mail
Tim Schlueter	*(573)751-3313*	*tim.schlueter@mshp.dps.mo.gov*

ITAB Alternate Name	Phone No.	E-mail
Larry Lueckenhoff	*(573)526-6201*	*larry.lueckenhoff @mshp.dps.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail
Clifford R. Gronauer	*(573)526-6200*	*clifford.gronauer @mshp.dps.mo.gov*

Department Technology Profile (2004)

Department Name	
Missouri State Highway Patrol a Division of the Department of Public Safety	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*State Data Center IBM 390 with MVS*
PC Servers	*RS/6000 with AIX, Windows NT, Linux*
Mid-range	*AS/400 with OS/400, RS/6000 with AIX and Linux*
Networked	*RS/6000 with AIX and Linux, Windows NT*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 98/2000/XP and Linux*
Dumb terminal	*None, Outside agencies being served have some*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA,	
Internet Connections (DSL, Cable, Dialup, etc.)	
Cable, Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee, Firewalls, Encryption, VPN, IBM Everyplace Wireless*
Desktop	*McAfee Virus Scan*
Internet	*McAfee, Firewalls, Encryption*
Help Desk Packages (Magic, GWI)	
Allen Systems' IMPACT	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, Oracle, SQL, SUPRA, ACCESS	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
COBOL, CICS, Advantage Gen, WebSphere, Focus, Web Focus, Vision Results, Mantis, Java	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	

VPN, SSL, IBM Personal Communications and Everyplace Wireless
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Librarian at the State Data Center
Telecommunications (T1, Frame Relay, etc.)
T1, Frame Relay, VTAM, MAN
GIS (ArcView, MapInfo)
GPS

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House of Representatives

Accomplishments

Security

- Performed a full Cyber Security Assessment
- Established an independent connection to the State Data Center (had previously shared a connection with the Senate)
- Upgraded to Windows XP Service Pack 2

E-mail

Deployed a new Microsoft Exchange 2003 server with additional storage capacity and also replaced the front-end server to meet increasing demand.

Help Desk

Established Performance Measurements that measure the following:

- Calls closed within 1 day
- Calls acknowledged within 30 minutes
- Percent and number of helpdesk complaints
- Calls that are deferred

General Projects

- Conducted a TabletPC Pilot Project
- Conducted a Bill Drafting XML Pilot Project
- Replaced oldest PCs on the network
- Deployed a Wireless Network (802.11g)
- Upgraded PCs from Windows 2000 to Windows XP
- Walled off and secured data center from the rest of the department
- Developed a number of new applications in vb.net including a hearing schedule, bill calendar, and statue index

Chamber Software Upgrade

We upgraded the House Chamber System from Daktronics Software to International Roll Call software. This added a number of new features.

Planned Projects

Website Redesign

We will be adding more functionality for constituents to interact with our website as well as adding a Speaker's page and Chief Clerk Page.

Intranet

We are replacing the current Intranet site with a portal. We also are adding an IS section to the site that will keep our users informed of the current status of all IS projects.

Network Access Control

Our plan is to deploy Cisco's Network Access Control system once it is released for our current hardware. At that time we will also deploy a virtual private network.

Blackberry Pilot

We are planning a project to deploy a limited number of Blackberry Devices and a Blackberry Enterprise server for the purpose of evaluating the product.

Constituent Management Pilot

We intend to conduct a pilot project using Microsoft's Customer Relations Management software for constituent management.

Accumulated Demand

The following projects are on hold due to the current budget constraints:
- Intrusion Detection & Prevention System
- Non-liquid Fire Suppression system for data center
- Upgrade MS Office to Office 2003
- Storage Area Network
- Virtual Private Network

General Department Profile (2004)

Department Name		
Missouri House of Representatives		

Street Address	City	Zip
State Capitol	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-3659		www.house.mo.gov

Department Director		
Catharine Hanaway- Speaker of the House		

Number of FTE (entire department)	Approximate number of citizens served
Approx. 400	

Agency Mission (brief statement)

Department CIO and IT Division Profile (2004)

Department Name		
House Information Systems		
Department CIO Name		
David Crain		
Street Address	City	Zip
State Capitol- Room B-16	*Jefferson City*	*65101*
CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-2357	*573-751-3292*	*david.crain@house.mo.gov*

*CIO Membership in Professional Associations – Leadership Role Involvement
(i.e., NASCIO – serve on architecture standards committee)*

ITAB, ARC

IT Division Name	Website URL
Number IT FTE (located in central office)	Number IT FTE (located in field)
17	
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded

Security Officer Name	Phone No.	E-mail
James Ransdell	*751-2357*	*james.ransdell@house.mo.gov*
Privacy Officer Name	Phone No.	E-mail
James Ransdell	*751-2357*	*james.ransdell@house.mo.gov*
ITAB Alternate Name	Phone No.	E-mail
Scott Skinner	*751-2357*	*scott.skinner@house.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
MO House	

Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Windows Advanced Server 2003*
Mid-range	*ISeries 820 (AS/400)*
Networked	*Microsoft Active Directory*

Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP*
Dumb terminal	

Network Protocols (TCP/IP, SNA, IPX, etc.)
TCP/IP

Internet Connections (DSL, Cable, Dialup, etc.)
Network connection to OADIS

Internet Service Provider (MORENET, AOL, etc.)
OADIS

Security Provisions (packages, anti-virus, filters)	
Network	*Cisco PIX Firewall*
Desktop	*Update Expert, SUS, Symantec*
Internet	

Help Desk Packages (Magic, GWI)
Custom Developed

Database Management Systems (DB2, Oracle, SQL, etc.)
DB2

Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)
RPG. VB.net

E-Mail Packages (Exchange, Lotus Notes, etc.)
Exchange 2003

Encryption Packages (SSL, PGP, etc.)
SSL

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Source Safe
Telecommunications (T1, Frame Relay, etc.)
GIS (ArcView, MapInfo)

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Department of Insurance

Introduction

The mission of the Information Services section of the Missouri Department of Insurance (MDI) is to develop and establish procedures, rules, policies, systems and services related to computer and other technologies that help satisfy the critical achievement requirements of Information Services customers throughout the department. Furthermore, Information Services must fulfill the traditional data processing mission of providing a dependable, efficient and secure computing and communication infrastructure; acting as stewards for the department's data and information resources.

Background

MDI's primary information system resides on a client/server system running Windows2000 and the Oracle database suite. This system consists of insurance producer licensing modules, company licensing and monitoring modules, consumer complaint and information modules and tax and data collection systems and other data collection systems. Personal computers are an integral part of the MDI network and are used for a wide variety of personal productivity and automation activities such as word processing, data analysis, and provide the gateway to locally networked, mainframe and Internet applications, both locally and remotely.

Accomplishments

Internet Initiatives

- *Seniors' Portal* - Web pages that pull together areas of interest for Missouri Senior Citizens, focusing on insurance related questions and information.
- *Electronic Non-Resident Licensing* by way of a collaborative effort with the NAIC's National Insurance Producer Registry (NIPR).
- *Medical Malpractice and JUA web links* to important related information.
- *CE Automation* - Expansion of the *Continuing Education* inquiry for online history of individual Producer's CE history.
- *Agency query* functionality to search for an agency status (previously could only search for the individual status).

New Systems/Software Implementation

- *Obsolete data systems* were re-written using modern database, programming and Internet-browser technologies. The recent list includes:
  - Cash Receipts module,
  - Property & Casualty Filing tracking
  - Converting the Life and Health Filing system
  - Products Liability Data Entry,
  - Commercial Liability Data Entry,
  - Life Supplement Data Entry.

- *Automatic Generation of Warning and Suspension letters* for Delinquent Licensees – In compliance with HB 600, a system was developed to exchange data with the Department of Revenue to identify and process required communications with Insurance Producers subject to license suspension for being delinquent in paying Missouri taxes.
- *Office Automation Projects*
  - *E-mail Migration* – As a cost-cutting measure, the department's e-mail and office automation system (Lotus Notes/Domino) was moved to an Intel-based "blade" server in the State Data Center. Not only will this move provide significant savings, it is a preliminary step to e-mail standardization and consolidation in the future.
  - An *Employee Master* database was developed from extracted SAMII data to serve as a validation file for other department human resource subsystems. It has the added benefit of providing a quick reference for employee data.
  - A *Phone Listing* database was implemented on the department's Intranet portal to provide a quick lookup of MDI phone numbers.
  - A *Speaker Calendar* system was implemented to improve scheduling and tracking of speaking requests and engagements of MDI personnel.

Disaster Recovery and Business Continuity

Continuing concern over the ability of the MDI to recover systems and data in the event of a catastrophic event produced improved data backup routines as well as off-site storage of critical program and data files. Constant monitoring assures the currency of these files and testing in conjunction with other agencies such as SEMA and the State Data Center not only exercise the plan, but serve to expose weaknesses, leading to further improvement.

Planned Projects

Electronic Non-Resident Renewals

Now that the MDI provides Electronic Non-Resident Licensing applications through collaboration with the National Insurance Producers Registry (NIPR), we turn our focus to providing Electronic Non-Resident Renewals via the Internet.

Electronic Resident Licensing
Similarly, the MDI is working closely with the NAIC to define and test an electronic resident licensing application as a component of the NIPR *State Based Systems* offering which includes other components such as company licensing and consumer complaints. Modules of the NIPR system are written in languages closely related to those of the MDI and are often readily adaptable. We are discussing the feasibility of the MDI developing its own custom electronic resident licensing application.

On-line Submission of Continuing Education Records
The MDI Licensing staff is constantly evaluating ways to improve processing and shorten the license issuance cycle. One proposal being evaluated includes the electronic submission of producer's continuing education records, including automatic validation and incorporation into the licensing approval processes.

Missouri Insurance Department Invoicing System (MIDIS)
Work continues to consolidate various invoicing systems into one common department-wide invoicing system that interacts with the statewide SAMII system. Invoicing subsystems nearing completion include the Examination Billing System and the Property & Casualty Filing System. Other component modules will include Cash Receipts, Life & Health Filing Fees, and automated SAMII updates and reporting.

Surplus Lines Reporting On-Line

The Missouri Department of Insurance requires reporting of all Surplus Lines company transactions and tax returns that result in a large amount of data entry for the companies as well as the MDI. The scope of this project includes developing an interactive application that is accessible, with adequate security, by way of the Internet allowing the Surplus Lines Appendix I and Appendix III forms to be prepared and submitted to the Department online and subsequently be audited and transferred to the database. This project has been designed and is in development.

Premium Tax and Tax Credit Calculation & Filing
The Premium Tax system, recently migrated from the State Data Center mainframe computer, collects tax-related information from all insurance companies licensed to do business in Missouri. Present efforts are focused on providing MDI staff with inquiry and ad-hoc report-writing capabilities.

Office Automation
Several additional office automation projects are planned to improve scheduling and control while streamlining approval processes. The current list of projects includes: Purchase Requests, Travel Requests, Expense Reporting, Employee Skills & Training, and HR Support Resources.

Accumulated Demand

MDI currently has a considerable backlog of IT requests. Most of these requests originate in functional areas of the department and include in-house application development, maintenance to existing programs, network and security maintenance, PC software and hardware troubleshooting as well requests to purchase PC equipment and software. Additionally, several enhancements have been requested to recently converted legacy systems. In order to succeed in meeting the needs of the department with the limited number of IS resources available, MDI supplements the IS staff with contracted services as requirements dictate.

General Department Profile (2004)

Department Name
Missouri Department of Insurance

Street Address	City	Zip
301 W. High St	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4126	*(573) 751-1165*	*www.insurance.mo.gov*

Department Director
Scott B. Lakin

Number of FTE (entire department)	Approximate number of citizens served
218	*100,000's*

Agency Mission (brief statement)
The mission of the Missouri Department of Insurance is to promote competition where it works and to implement regulation where competition fails so that consumers can make informed insurance purchasing decisions based on price and quality. To accomplish that mission, the department strives to: 1) ensure that consumers get the benefits for which they paid; 2) ensure competence and trustworthiness of insurance professionals; 3) ensure consumers have access to affordable and suitable coverage; and 4) ensure that insurance companies remain financially solvent so that customers get their claims paid.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Department of Insurance		
Department CIO Name		
Tim Dwyer		
Street Address	**City**	**Zip**
301 W. High St	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
751-1952	*526-3416*	Tim.Dwyer@insurance.mo.gov

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	

IT Division Name	Website URL
Information Services	

Number IT FTE (located in central office)	Number IT FTE (located in field)
12	*0*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
Not Available	*Not Available*

Security Officer Name	Phone No.	E-mail
Willis Doss, Jr.	*751-1952*	Willis.Doss@insurance.mo.gov
Privacy Officer Name	**Phone No.**	**E-mail**
Kevin Jones	*751-2619*	Kevin.Jones@insurance.mo.gov
ITAB Alternate Name	**Phone No.**	**E-mail**
Mary Plassmeyer	*751-1952*	Mary.Plassmeyer@insurance.mo.gov
SDC Steering Committee Rep Name	**Phone No.**	**E-mail**
Tim Dwyer	*751-1952*	Tim.Dwyer@insurance.mo.gov

Department Technology Profile (2004)

Department Name	
Missouri Department of Insurance	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 390 via the SDC*
PC Servers	*IBM, Dell (Windows 2000)*
Mid-range	*None*
Networked	*IBM, Dell, Gateway (Windows NT & Windows 2000)*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Dell, Gateway (Windows 2000)*
Dumb terminal	*None*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Cable, Remote Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee ePolicy; Windows Security*
Desktop	*McAfee*
Internet	*PIX & AIX Firewalls via the SDC, VPN*
Help Desk Packages (Magic, GWI)	
Intuit: TrackIT	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Oracle Developer, PL/SQL, MS Access, VB, Lotus Notes/Domino, Java/JavaScript, Dreamweaver	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes/Domino	
Encryption Packages (SSL, PGP, etc.)	
Lotus Notes Encryption, SSL Security	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

None
Telecommunications (T1, Frame Relay, etc.)
T1 lines to KC & STL + T1 to KC-NAIC (Nationwide StateNet)
GIS (ArcView, MapInfo)
Atlas GIS, Geo Access

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Department of Labor and Industrial Relations

Overview

The Vision of the Department of Labor and Industrial Relations (DOLIR) is to be the nationwide leader in providing the best working environment for all Missourians.

The Mission of the DOLIR is to provide safe and healthy workplaces and ensure economic security for all Missourians by promoting equal access to jobs, enforcing anti-discrimination laws and awarding payment of compensation to those unemployed through no fault of their own, injured at work and victims of crime.

The DOLIR, through the: Labor and Industrial Relations Commission; Division of Labor Standards (DLS); Board of Mediation; Division of Workers' Compensation (DWC); Division of Employment Security (DES); Commission on Human Rights; Office of Information Technology (OIT) and Administration has impact on potentially *ALL* citizens in the State of Missouri. Additionally, the DOLIR provides informational assistance to federal agencies that potentially impact citizens across the nation.

During 2004, the DOLIR continued its progress on developing systems, implementing procedures, improving processes and providing Information Technology services for its customers. The following are accomplishments within the DOLIR OIT for calendar year 2004.

Accomplishments

ISeries Applications

Electronic Data Interchange (EDI)
EDI reporting for DWC is an initiative adopted by the International Association of Industrial Accident Boards and Commissions (IAIABC) to develop standards for

reporting information electronically to save time, reduce resources, increase accuracy and improve statistical reporting. Missouri has participated in this project since 1995.

The use of EDI for electronic transmission of the First Report of Injury has continued to expand. In 2004, 26 new EDI trading partners were added for a total of 100. Of 128,333 First Reports of Injury processed in 2004, 77% (99,142) were received through EDI, resulting in a savings of two data entry staff. Approximately 81% of the first report of injuries received through EDI was accepted on the first transmission.

In 2004, application enhancements were implemented to process First Report of Injury Changes and Corrections via EDI in addition to Originals. EDI Review processes were enhanced and custom error processes were added to facilitate quick turnaround of EDI acknowledgment records. The application enhancements reduced the average number of days for EDI acknowledgments from four days during the last half of 2003 to one day for the same period in 2004. Programming was completed to import EDI First Reports of Injury into the image case file. Approximately 587,000 historical and current First Reports are now available through image.

A pilot project for Secure File Transfer Protocol (FTP) transmission of EDI First Reports of Injury is currently being reviewed. This will provide insurers and claim administrators the ability to transmit secure files directly to the state, eliminating the use of EDI third party vendors and provide significant savings to stakeholders. The three pilot customers will realize approximately $35,000 per year in savings. Based on the volume of EDI transactions received to date in 2004 and a large number of active trading partners subscribing to the service, this represents a total potential savings of over $347,000 annually to insurers and claims administrators submitting First Reports of Injury via EDI to the DWC.

Electronic Data Distribution (EDD)
EDD allows DWC stakeholders to receive docket notice letters via email saving postage and printing expense of regular mail. Since January 2004, the number of EDD customers has increased from 31 to 57, an increase of 84%. To date in 2004, 59,875 docket letters have been sent via EDD, a savings of over $19,300 in postage expense. In 2004, programming was completed to distribute DWC Information Request letters by EDD and to date 8,985 of these letters have been sent electronically.

End User Reports
Over 35 end user reports were developed for use by WC Self Insurance, Injury Processing and Administrative staff. These reports have eliminated over 200 Information Systems Service Requests in 2004 and saved over three months of IT staff time while providing DWC staff with more timely access to needed information.

SIF Actuarial Study
Provided data and statistical analysis of the DWC's Second Injury Fund caseload and benefit payments. The completed report establishes a sufficient surcharge rate to insure

an adequate fund balance for Second Injury Fund benefit payments while keeping insurer surcharge payments to a minimum.

Crime Victims' Compensation Partial Refunds

Completed enhancements to the Crime Victims Compensation system to automate partial refunds of Crime Victims benefits, allowing utilization of all external payment sources and timely payments to victims of crime in Missouri. Since September 2004, $16,465 in partial refunds have been received.

Remote Adjudication Module (RAM)

Enhancements were installed to the RAM system to provide viewing of all image formats through the RAM image component, enabling over 930,000 additional documents for display and more informed decisions by DWC judges and legal staff.

DWC Case Resolution

Case Resolution enhancements were completed in October 2004, allowing DWC Administrative Law Judges to enter multiple settlements for the same part of a case. This upgrade provides judges more flexibility and better service to injured workers when a second settlement is needed for future medical purposes or Second Injury Fund issues are to be decided in the future after the Lost Wages settlement.

DWC Dismissal Letters

Revised dismissal procedures were implemented in July 2004, requiring modifications to eight dismissal notices and revised workflow processing for the scanning of notices. To date, 19,480 revised letters have been printed, improving the clarity of the dismissal process and eliminating overhead of unnecessary docket settings.

DES Electronic Folders

Electronic folders will automate claims processing at the four DES Regional Claim Centers (RCCs), allowing them to work from electronic folders from the initial claim through the determination phase. Over 1.4 million documents will be moved from archive image processing to front-end imaging, eliminating manual paper processes and allowing the use of workflow and integration with mainframe applications to automate existing processes. High-level discussions, information gathering sessions, and the Requirements Analysis and Design have started with an expected completion date of January 15, 2005.

DWC Business Analysis

A Request for Proposal (RFP) will be released in December 2004 requesting contractual services to provide a complete business operation analysis of the DWC and make recommendations for current/future information systems direction based on business requirements. The analysis will provide current/future needs assessments, data strategy, current/future workflow diagrams, risk assessments and other documents in support of the recommendations based on business requirements.

Web Applications

Electronic 1099 Information Request

In December of 2002 the DOLIR initiated the E-Government process to allow the request and print of 1099 Information for Unemployment Insurance (UI) via the Internet. Current and former claimants can request UI 1099 information via the Internet from up to 10 previous years. December 2003 through November 2004 accounted for 5,696 successful 1099 requests from UI claimants. This operation saves labor and mailing costs as well as providing twenty-four hours, seven days a week access for the public.

Internet Address Change

In September 2002, the DOLIR started the E-Government process to allow the UI claimants to update their address via the Internet. Current claimants can update their addresses to ensure checks and other correspondences are mailed to the correct location. This provides more timely mailings along with less returned mail. December 2003 through November 2004, accounted for just over 2,200 successful Internet address changes for UI claimants.

WEB Page Development

The DOLIR OIT continues to enhance its Internet home pages by addressing items listed in the E-Government Score Card. These include providing more and better information that increases usability for our customers. Some of the accomplishments in this area include:

Public Facing

- Completed the DLS Annual Wage Order including all incremental changes available on the Internet during second quarter 2004. This eliminates the mailing of Annual Wage Order compact diskettes throughout the year and provides 24-hours, seven days a week access to the Annual Wage Orders by authorized parties.
- Added Nursing Home Hazards section to the DLS's On-Site Safety and Health Consultation Program web site. This provides examples of unsafe practices and is used as a training aid by nursing homes.
- Completed the conversion to dolir.mo.gov URL address format. This provides an easy to remember web address.
- Completed the email conversion to dolir.mo.gov and new naming formats. This provides an easy to remember email address for the public to contact the DOLIR.
- Continued the cross agency project to enter DLS Child Work Certifications via the Internet for more timely, and accurate reporting. This is a cooperative effort using the Department of Elementary and Secondary Education's web based system for the public schools to provide the authorization to access the Child Work Certification system at the DOLIR. This pilot is scheduled for the first quarter 2005.

Internal (Intranet) Facing

- Completed and implemented the second phase of a Maintenance Work Order (MWO) intake and editing system using the Intranet and Microsoft Access (MS-Access). This phase adds an Intranet front-end system allowing the DOLIR staff in the various offices to submit maintenance requests and an Intranet inquiry so they can see the status of these requests across the state. Central Office maintenance staff can then input and edit MWOs. The maintenance section can track the work requests and do reports on how many they have, how long each took, and how much they cost.
- Completed rewrite of the DOLIR Intranet phone book. This provides easier/faster updating, multiple searches, and a browser based printer friendly format for printed copies.

PC Applications

The DOLIR constantly looks for ways to enhance processes, applications, develop new systems and integrate new development with legacy systems for increased functionality. Accomplishments in this area are:

- Completed major enhancements during second quarter 2004 on the MS-Access-based Field Auditors Case Tracking System-2002 (FACTS-2002). This system is used by approximately 85 DES UI-Tax Field Auditors to perform some 3,500 compliance audits. It is also used for preparation of delinquent quarterly reports.
- Completed and implemented the second phase of a Disaster Unemployment Insurance (DUA) intake and editing system using MS-Access. This allows the RCC staff to perform most of the initial entry prior to transferring the claim to the Central Office where the final entry and verification is conducted. Central Office staff can then input DUA information, ensuring cases are entered correctly. The collected data is then transferred to the mainframe for final processing and record storage.

Internet Contribution and Wage Reporting – Unemployment State Tax Automated Reporting System (USTAR) – This is a major project across all DOLIR platforms
The DES realized it needed to provide a way for approximately 130,000 Missouri employers to conduct UI tax business electronically via the Internet. The DES wanted to provide its customers an easy and convenient way to conduct business with the agency.

On July 6, 2004, the DES began its first pilot of USTAR. This new Internet-based system went live for a group of approximately 500 Missouri employers. During this first pilot, employers were able to register, file reports, upload file transfers, and submit payments with their report or file transfer. There were 404 contribution and wage reports submitted through the USTAR system. This included wages for 17,666 workers. There were 204 Automated Clearing House (ACH) transactions. Contributions in the amount of $380,342.07 were paid by ACH debit. A second pilot encompassing a larger group of employers began on October 12 with additional features made available. It is anticipated the system will be available for all 130,000 employers in the state on January 2, 2005.

The USTAR project databases were implemented into the development, test, and production environments on mainframe and server platforms. Queues and processes were established for moving the application to production and Bind and Compile processes were set up. Servers were installed, WebSphere was set up, and ongoing network needs were evaluated and addressed as needed.

The USTAR project team integrated the system with the image system. This integration includes image import functions where images are initially placed into a DB2 table and DB2-Connect is used to transfer the images to the iSeries where they are imported using Workfolder Application Facility (WAF) Automated Program Interfacings.

The following are comments from customers using the USTAR system:
- "Good design job! Much easer than the paper report"
- "I love it! I'll use the site from now on"
- "Where have you been? I love this web site…"
- "Filing electronically is great! I will definitely use it in the future"

The DES Business Project Manager was awarded the Information Technology Recognition Award for her contributions to the success of the project.

Mainframe Applications

- The DOLIR has processed 242,454 UI claims via the Internet since implementation on December 19, 2000. This represents approximately 1,700,000 minutes or 28,300 hours of time savings in the user community. The approximate cost savings to the toll free telephone access number is $119,000.

- As of October 4, 2004, 1,337,942 weeks of compensation claims have been processed since May 11, 2002. This represents approximately 4,000,000 minutes or 66,900 hours of time savings. The approximate cost savings to the toll-free telephone access number is $281,000.

- Implemented 2004 law changes, House Bills 1268 and 1211. These bills modify the laws governing the Missouri unemployment trust fund. All, except the penalty on the fraud overpayments, will go into effect on January 1, 2005. Fraud overpayments penalty goes into effect on July 1, 2005.

- Developed an online method for internal customers to correct invalid account numbers supplied by employers rather than return data to employer. This allows the customer to correct the wage reports with errors in the account number on-line.

- Completed Benefits and Tax data validations. These programs validate the information sent to the Federal Department of Labor by which statistics are gathered and monies are allocated to the state. These are separate programs to

validate these figures to ensure that the proper amount of monies is allocated to the state.

- Implemented a process to put the benefit charge statement online, this will reduce print costs as well as mailing costs. Exact savings unknown at this time.

- Created, developed, and implemented a new system that automates handling of lessor and lessee accounts. This has to do with provisions in the law that effect cases where a lessor or lessee does not pay taxes owed and then the other party must pay. Changes to the lessor account will automatically cause alterations to the lessee for that account and will cause computer-generated correspondence to be produced. A new file was created along with Customer Information Control Transactions (CICS) to complete a quarterly form required by all lessors.

- Implemented Wage Record Interchange System (WRIS), to reduce staff time. This system allows automatic requests of wage records through the Interstate Connection Network.

- Implemented Alternative Trade Adjustment Assistance for Older Workers (ATAA). Under the ATAA program, workers in an eligible worker group who are at least 50 years of age and who obtain different, full-time employment within 26 weeks of separation from adversely-affected employment, may receive up to half of the difference between the worker's old wage and the new wage, up to a max of $10,000 during a two year eligibility period. The newly implemented system allows such workers to take advantage of the benefits this program offers them.

- Converting all mailings to Group 1 software, discontinuing the use of Pitney Bowes Finalist product. This will reduce costs to the DOLIR by eliminating the costs of the Finalist product and will aid in the streamlining of the mailroom processes.

- Converting Assembler language programs to COBOL. This will allow individuals within the DOLIR OIT to maintain these programs when retirements occur for staff with the knowledge and experience in the Assembler language

- Programming is ongoing to implement a process to print UI, refund, and Trade Readjustment Act checks on pressure seal paper. This will streamline the mailroom process by eliminating any unnecessary handling of checks.

Infrastructure/Architecture/Operations Support

The DOLIR OIT continues to make modifications and process improvements to its iSeries (AS/400) architecture and infrastructure. Some of the modifications and improvements of the past year include:

- A Kofax Scanning Subsystem was placed into production for the DES. Documents previously scanned into the Scan-Optics system were transferred to an existing Kodak scanner. Automated processes were duplicated within the new Kofax system and the unsupported Scan-Optics system was retired.

- The platters from three older Optical 3995 model 123 optical libraries were transferred to a newer optical library and maintenance was dropped on the older hardware. Approval of the requested AS/400 upgrade will allow the DWC to begin storing images to direct access storage devices (DASD) and to retire older, high maintenance, optical devices.

- EDI Reports of Injury were imported into the image system, which expanded optical storage requirements for the DWC. In the first year, 586,336 reports were imported (the majority of which were older documents scanned for archival purposes). The estimated volume for upcoming years is 100,000 documents yearly.

- Remote Job Entry (RJE) transfer of Employer Tapes was replaced with a File Transfer Protocol (FTP) transfer procedure. This change placed IT one step closer to retiring the 3745 Communications Controller. The 3745 Communications Controller is an older piece of International Business Machines (IBM) equipment, which at one time was the core network products connecting remote offices to the mainframe. As the network has evolved, the functions performed by the 3745 controllers have been replaced with the servers, routers, and switches that make up the modern network. Over the last five years, more and more functions have been pulled off the 3745 controller resulting in it being used less while maintenance costs continued to rise. By moving this process from RJE to FTP, the 3745 controller can be disconnected and save the maintenance costs.

- Appeals image print processing was automated so that they are now printed in batch in the computer room, rather than staff displaying and printing cases individually. This saves considerable staff time for Appeals.

- Substantial work was done for two upcoming projects. First hardware has been consolidated, moving System Product Division (SPD) cards from two older racks in preparation for a hardware upgrade. Operating System (OS) upgrades also were applied to all partitions in preparation for a hardware upgrade. Currently Version 5 Release 2 fixes are applied. This was a necessary prerequisite for replacing all SPD cards with new Peripheral Component Interface (PCI) and PCI-X adapters. The OS upgrade has also allowed dynamic processors allocation between partitions. This upgrade will position the DOLIR to take advantage of the latest technology from both a hardware and software standpoint. Being on the latest technology ensures a more stable platform and guarantees support from IBM should problems occur. As the AS/400 iSeries is a key component of the

business systems used by the DOLIR, it is imperative that it is available, reliable, and responsive.

- The second upcoming project was the Electronic Folders project. In preparation for this project, Fax Server capabilities were included in the hardware upgrade, providing a very economical fax alternative. Training is scheduled for Content Manager image software for the Electronic Folder project. This project is in response to a request from the business users. The intent of the project is to save staff time and money by eliminating the need to transfer paper files from office to office. As envisioned, the system will allow RCC staff member at locations throughout the state to access any and all claims.

- Two major projects that entered the planning stage in 2004 were email consolidation and domain consolidation. These projects were begun on a statewide basis with the goal of saving money and resources. There are still many unanswered questions with both of these efforts.

The DOLIR OIT continues to make modifications enhancements and process improvements to the mainframe environment. Modifications and enhancements of the past year include:

- Setup Secure FTP processes for employers to send and receive benefit charge and other pertinent data.

- Begin the task to convert Assembler programs to COBOL. Assembler knowledge will be leaving in the next few years as staff retires. Assembler is an older programming language and the chances of finding new staff that have the skills necessary to do this work are slim.

- Converted processing of wage tapes from RJE to FTP.

- Setup process to FTP page segments from iSeries to mainframe.

- Changed network definitions to eliminate the need of having a local 3745 communications controller.

- Helped bring Infoprint 4000 printers online, positioning the DOLIR to be able to modify the check writing process for more cost effective production.

- Participated in Disaster Recovery exercises with the State Data Center.

- Developed and put into production change control process for JCL libraries.

- Setup ISPF panels for some operator tasks.

- Setup procedure to FTP redeemed UI checks.

- Added more reports to Mobius to cut down on printing costs to the DOLIR.

The DOLIR OIT continues to implement numerous initiatives and undertake projects in the Telecommunications area. Work done in the Telecommunications area is almost always in response to requests from the business users in the DOLIR. Office moves can happen because leases expire, clientele has shifted, or other factors. The driving force behind these initiatives is to provide the best Telecommunications services. Projects this year included:

- Cape Girardeau - Contributions Field moved into a new building June 2004. The DWC also expanded its work area. New wiring for both locations was done at the same time.

- St. Louis - A conference room was built on the first floor in the downtown DES office. The Telecommunications section added voice and data wiring for the conference room.

- Springfield - In the downtown DES office, all voice and data was removed from the basement. This area is to be renovated some time in the future.

- Kansas City - The second floor of the DES downtown building was renovated in phases. The Contributions Field Section was the first office to move back into its new space in August 2003. The Commission on Human Rights moved into the second floor of the DES building in June 2004. Appeals moved from the basement to the second floor in August 2004. The basement is currently vacant and due for renovation sometime in the future. The Telecommunications Section rewired the voice and data networks on both the second floor and in the basement during this project. This work was necessitated by the above renovation and changes in entailed.

- All RCCs received additional fax machines, which required additional wiring.

- Jefferson City - The DLS underwent a major telephone update in August 2004. The Labor Commission underwent a major data update in order to convert them to Ethernet.

- Facility and Maintenance wireless voice communications was updated to Nextel services statewide.

- Blackberry equipment and services have been deployed within the DOLIR. Six units are currently being used in a proof of concept project.

- Branson - Contributions Field will be moving into a new multi-tenant building in December 2004. The wiring for voice and data has already been completed.

The DOLIR OIT continues to implement numerous initiatives and undertake projects in the Network Operations area. Work done in the Network Operations area is almost always in response to requests from the business users in the DOLIR, either directly or indirectly. New network equipment may be required to meet a new mandate or support a new application. Technology upgrades may be necessitated by the lack of support for older versions, or the need to simplify, speed up, or otherwise improve the way things are done. The driving force behind all these initiatives is to provide the business users with a way to connect to the Applications they need so that they can deliver the services they are responsible for. Projects this year included:

- Upgraded all Integrated Voice Response (IVR) and related systems to latest software versions.

- Planned and recommended new remote terminal configurations for all RCCs to eliminate second supervisor workstation by installing additional video cards.

- Installed new core 7206 router in Central Office to increase capacity to remote sites and stay in a supported environment.

- Installed new core 6506 switch in Central Office to replace out-of-date hardware and gain functionality.

- Migrated the Springfield, Kansas City and Jefferson City RCC buildings to Ethernet from Token Ring.

- Installed new Exchange 2003 Server and moved all DOLIR users to new server.

- Removed or blocked unused security features from all routers and switches.

- Installed network equipment to interface with the new heating ventilating and air conditioning (HVAC) system in the Springfield RCC and installed voice and data connections.

- Installed Simple Mail Transfer Protocol (SMTP) Mail Gateway virus protection software, GFI.

- Installed CC Announcer in the Kansas City RCC.

- Installed new IBM 4000 printers capable of Magnetic Ink Character Recognition (MICR) printing to allow the production of machine-readable information on the bottom of checks as part of new check writing process.

- Started printing the new ATAA checks.

- Acquired new check verifier to insure new check process and printers generate checks meeting banking industry standards.

- Changed process to enter check volume here instead of sending physical tape to the State Data Center.

Security

In late 2004, the DOLIR was awarded three grants by the United States Department of Labor's Employment and Training Administration (ETA). The three security grants totaling $278,412 for UI Information Technology improvement projects will be used to supplement the cost of Missouri's UI Benefits and Tax Information Technology Systems for:

- Security Awareness, Training, and Education - will be used to develop, implement, and periodically update an agency-wide security awareness training program to address basic security issues, social engineering attacks, information classifications, and virus defenses.

- Unemployment Insurance Information Technology Hardware and Systems Software Maintenance - will be used to purchase services, a comprehensive virus patching software, accompanying hardware, and training for continued maintenance associated with network security/defense system.

- Unemployment Insurance Information Technology System's Security Risk Management - will be used to contract an independent third-party contractor to conduct a technical and security evaluation of the agency's information system's certification and accreditation process. This will be accomplished by analyzing systems, evaluating operations procedures, and testing other aspects of the integrated unemployment insurance operation.

The Missouri DOLIR has continued to enhance information security. As evident by the following:

- Performed quarterly user account audits.
- Performed unauthorized file access attempt audits.
- Conducted Information Security briefings for New Employee Orientations.
- Performed periodic audits of entries to secured OIS areas.
- Conducted NIST Managerial Security Assessment.
- Initiated new policy and procedures for sanitizing surplus electronic media.
- Conduct ongoing review and enhancement of the security policies.

Help Desk

The DOLIR OIT established a consolidated Help Desk, in January 2000 to provide support for its internal customers. During the calendar year 2004, the Help Desk has had 11,218 problems resolved successfully. The 2004 customer satisfaction metric from customer surveys was 92%.

This year, 40% [478] of PC inventory was replaced with new equipment. Due to the replacement effort, the DOLIR has moved almost totally to the Microsoft XP operating system, enabling improved security patch installation.

Project Review Office

The DOLIR maintains and develops numerous operational standards and procedures to provide structured Project Management. This office also coordinates the DB2 Database. Specific accomplishments are:

- Implemented Advantage:Gen 6.0 TCP/IP Direct Connect into development, test, and production replacing the Communications Bridges.

- Upgraded the Advantage:Gen 6.0 Encyclopedia, TCP/IP Direct Connect, and workstation to version 6.5.

- Implemented several new processes in DB2 including, but not limited to, online backups, online reorgs, listdefs, and templates.

- Upgraded DB2 UDB workstation to version 7.1.

- Installed DB2 UDB version 8.0 in a test workstation environment and migrated a version 7.1 test subsystem to version 8.0 on the mainframe testing the compatibility between the new versions of the software on different platforms in preparation for the eventual upgrade.

Staff Training

To align Information Technology to business requirements and to respond to the customer's demands, the DOLIR places high emphasis on training. Major emphasis has been to train DOLIR OIT employees in the following areas:

- WebSphere Administration
- Certified Cisco Networking Bootcamp
- Certified Cisco Network Associate
- Business Analysis
- Project Management
- Wireless Communications and Networking
- Crystal Reports
- Dreamweaver
- Microsoft Project

Planned Projects

Project Review Office

This office has been established to monitor all aspects of all projects from inception to through the move to production.
- Publish and update the development standards.
- Establish baselines on projects and track performance.
- Assure all aspects of development are auditable and documented.

- Assure capacity planning is addressed on all projects.
- Maintain a comprehensive inventory of quality standards, policies and assure staff understands quality measures.
- Inspect all projects to insure quality standards are met and maintain quality metrics.
- Assure project/system documentation is current and available to all staff.
- Scrutinize human resource requirements to assure all projects are staffed with appropriate skill sets.
- Determine staff utilization to assure staff is totally utilized across projects.
- Determine staff utilization to assure staff is totally utilized across projects.

Business Analysis

The DOLIR OIT will continue to promote a business analysis approach to clearly document business requirements, provide business justification for project initiatives, and manage projects through implementation. The Business Analysis concept moves away from the traditional "IT Project" approach and allows a much greater focus on analyzing business problems and aligns technology to meet business demand. Business users will take ownership and allow IT to be more productive by focusing on the technology rather than the business problem. The DES has identified two staff to begin project management training as it moves towards a business analysis role. As this process evolves and business analysts are trained, they will be managed through a matrix management approach with dual reporting to the business and IT.

Other Projects

Other projects to be undertaken during 2005 include:
- Design, build, and populate a data warehouse to support Ad Hoc reporting for DOLIR. Crystal Reports is the tool the DOLIR has chosen to use when accessing this data.
- DES Electronic Folders - Claims processing automation at the RCCs is a key initiative for DES in 2005. The requirements analysis currently underway will be completed in January with plans to move forward with the design, development, and implementation of the system. This project will provide DES the ability to effectively manage and share staff resources along with timelier processing of claims for unemployed workers.
- DWC Business Operations Analysis - The RFP released in December of 2004 will be completed and, as resources are available, the next steps will be taken to go forward with the implementation of short-term and long-term recommendations from the business analysis.
- DWC EDI Secure FTP - The pilot project currently in progress will be completed and the secure FTP service will be offered to all EDI trading partners. This project eliminates the need to use EDI vendors to submit electronic reports and will be a significant savings for trading partners.
- DWC EDI First Report of Injury - The completion of the Denial, Cancellation, and Acquired Claims EDI Maintenance Type Codes will complete the EDI

project for the First Report of Injury and position the agency for the implementation of mandatory EDI reporting for the First Report.

- DOLIR Document Imaging - This project will begin the department wide migration to Content Manager to replace the obsolete WAF image software in use today and protect the DOLIR's investment in the 36,000,000 document images supported today. The Content Manager software provides increased functionality, advanced workflow, web integration while moving storage requirements to DASD reducing the need for expensive optical storage.
- DWC Correspondence Control Programming - This system enhancement will allow correspondence to be tailored to business need and case requirements rather than driven by time frames, eliminating unnecessary printing and postage.
- Internet UI Claims status Inquiry.
- Take telephone numbers and witness names for Appeal Hearings by the Internet.
- Upgrade Internet UI Mass Claims process so employers can file Mass Claims with minimal DOLIR staff intervention.
- System to allow business area users to update/maintain their web content.
- Rewrite Labor Standards Complaints and Violations into a more efficient and effective system.
- Continue to expand use of MOBIUS as an alternative/replacement for printed output.
- Implement processing to eliminate all "garbage", zero Social Security number (SSN) records from use. This will aid the USTAR process in the handling of invalid SSN records. A fictitious non-zero SSN will be assigned as data enters our files. The DB2 files of USTAR will be able to process the data. After six quarters, all SSN wage data will be contained on one file.
- Implement procedures where employers can receive Benefit Charge Statements through the Web. This will reduce the mailing of Benefit Charge Statements, thus aiding the streamlining of mailroom activity. The employer community will be able to process their Benefit Charge Statements in a more efficient manner.
- Modify the mass claims process to happen without DOLIR OIT intervention. This would allow for the requests for mass claims to be processed without intervention from either the Business staff or IT. Currently, the handling of these files is a manual process.
- Implement system for on-line verification of SSNs. This will allow a request to be triggered through the Social Security Administration to verify an SSN taken during the claims process. This process is currently a nightly batch process.
- Implement system to allow the customers using Wage Record Inquiry System (WRIS) to determine which states have needed SSNs. This is an online application that allows one to inquire on the WRIS DDBI file (a quarterly file of SSNs sent by the state) at the hub to determine which states have wages for a particular SSN.
- Eliminate the paper flow between Employer Liability and the Department of Economic Development (DED) to assign North American Industry Classification System (NAICS). Implementing this process will eliminate the paper flow between the DES and the DED. New employers will be activated in a more

timely manner by the elimination of this paper flow. Will modify the workflow in the Customer area by not having to handle the documents additional times.

- Implement web processing to have individual claimant information available. This will increase the claimant information available on the web. The number of telephone calls to the user community will be reduced and the use of Internet will be increased.
- Upgrade Internet UI Mass Claims process to be hands-off capable.
- Continue taking part in email consolidation and domain consolidation committees.
- The Management Information System (MIS) used in the RCCs is reaching the end of its supported life. A project will be undertaken to replace this system. The system chosen may involve an investment in the technology necessary to utilize voice over IP (VoIP).
- An assessment and review of current network infrastructure and future enhancements will be undertaken separately as well as within the USTAR and Electronic Folders projects.
- Begin iSeries upgrade process
- Add sufficient DASD to allow migration from optical media to begin.
    - New supported hardware.
    - Latest version of the OS.
    - Implement Content Manager.
- DWC - St. Louis, St. Charles, and St. Joseph data wire update for Ethernet conversion.
- Jefferson City DES Building - Move east data closet on first floor to the data closet by east elevator.
- St. Louis Downtown DES Building - wiring on the second floor updated for Ethernet conversion. Two 25 pair cables need to be run.
- Fraud will undergo a major telephone programming change, including several new numbers.
- Jefferson City DES Building main switchboard will undergo a major telephone update.
- Kansas City DES Building downtown will be moving, which may require a variety of technologies to be updated.
- Move mainframe printers from channel attachment to Ethernet attachment allowing for the retirement of the channel extender boxes here and at the State Data Center.
- Continue translation of Assembler programs to COBOL.
- Retire 3745 Communications Controller.
- Implement new check writing process for UI checks.
- Continue succession planning.
- Knowledge transfer
- Cross training
- Backfilling positions
- Implement the inventory of business rules, which will be extracted by an automated tool, to be chosen in first quarter 2005.
- Implemented processes to allow users to do various date changes to accounts, process reverse account transfers, and all joint account processes on-line rather

than through a memo. This process provides greater ease and flexibility in making changes to account dates and in many cases will produce a letter to the employing unit explaining the change in date.

Accumulated Demand

The expanded use of information technology is essential in providing the services and accountability the DOLIR customers and the citizens of Missouri expect and deserve.

New systems being implemented and under development are much more complex and require knowledge of interoperability issues, web delivery of services, increased security requirements and expanded use of electronic procedures. This significantly expands training and support requirements along with the need for staff with specialized skills. As current staff retires, cross training and knowledge transfer must occur to retain business continuity. Statutory changes to existing systems are ongoing and we anticipate more need in this area as future legislation is passed. Ongoing maintenance of existing systems is required to support daily business operations. As priorities, budgets and resources all continue to shift, DOLIR OIT must maintain existing staff positions to handle the demand.

The DOLIR OIT currently has 93 outstanding requests over one year old and the total estimate for current latency demand is 13 man-years. The DOLIR OIT is taking steps to address these requests while positioning for future needs. An expanded training emphasis is underway to allow better management of IT projects and supply staff with the specialized training needed. As DOLIR continues moving toward a business analysis approach for new projects, the role of IT will change, allowing a greater focus on implementing business solutions.

The DOLIR OIT will continue to maximize the use of available resources to provide quality IT solutions to its customers.

Department of Labor and Industrial Relations Profile (2004)

Department Name
Department of Labor and Industrial Relations (DOLIR)

Street Address	City	Zip
3315 West Truman Boulevard, *PO Box 504*	*Jefferson City*	*65102-0504*

Main Phone Number	Main Fax Number	Website URL
(573) 751-9691	*(573) 751-4135*	*www.dolir.mo.gov*

Department Director
Ms. Catherine B. Leapheart

Number of FTE (entire department)	Approximate number of citizens served
1142 Full Time and 106 Part Time	*The DOLIR, along with all agencies within its operational control, has impact on potentially ALL citizens in the State of Missouri. Additionally, the DOLIR provides informational assistance to federal agencies that potentially impacts citizens across the nation.*

Agency Mission (brief statement)
Our mission is to strive to provide employees with safe and healthy workplaces and ensure economic security for all Missourians by promoting equal access to jobs, enforcing anti-discrimination laws and awarding payment of compensation to unemployed through no fault of their own, injured workers and victims of crime. In addition, the DOLIR strives to provide Missourians with equal employment opportunities while it also strives to prevent and eliminate unlawful discrimination. The DOLIR provides educational information to Missourians regarding their rights and responsibilities under the labor laws.

Department CIO and IT Division Profile (2004)

Department Name
Department of Labor and Industrial Relations (DOLIR)

Department CIO Name
Mr. Hayden Hill

Street Address	City	Zip
421 East Dunklin Street, P.O. Box 59	*Jefferson City*	*65104-0059*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 751-9657	*(573) 751-0167*	*Hayden.Hill@dolir.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Information Technology Advisory Board; State Data Center Evaluation Committee; National Association of State Workforce Agencies; Chairman, Information Technology Portfolio Evaluation Committee; Vice President, Jefferson City Chapter of InfraGard; CyberSecurity Committee of the Homeland Security Council

IT Division Name	Website URL
Office of Information Systems	*www.dolir.mo.gov*

Number IT FTE (located in central office)	Number IT FTE (located in field)
74.00	*N/A*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
N/A	*N/A*

Security Officer Name	Phone No.	E-mail
Mr. Fernando Mendez	*(573)751-7073*	*Fernando.Mendez@dolir.mo.gov*
Privacy Officer Name	**Phone No.**	**E-mail**
Ms. Cynthia Quetsch	*(573)751-9691*	*Cynthia.Quetsch@dolir.mo.gov*
ITAB Alternate Name	**Phone No.**	**E-mail**
Mr. Stuart Huddleston	*(573)526-3585*	*Stuart.Huddleston@dolir.mo.gov*
SDC Steering Committee Rep Name	**Phone No.**	**E-mail**
Mr. Alan D. Spears	*(573)526-3586*	*Alan.Spears@dolir.mo.gov*

Department Technology Profile (2004)

Department Name	
Department of Labor and Industrial Relations (DOLIR)	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 390 with MVS at State Data Center*
PC Servers	*Microsoft Windows NT, Microsoft Windows 2000, Microsoft Windows 2003, Linux*
Mid-range	*IBM AS/400 Model 830 2402 with OS/400 V5.2*
Networked	*N/A*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows NT, 2000, XP, OS2*
Dumb terminal	*N/A*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP and SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee, Trend Micro Scan Mail*
Desktop	*1300 McAfee*
Internet	*IDS, firewalls*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, SQL, Access Database	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
COBOL, CICS, Assembler, SAS, All Fusion, All Fusion:2E, All Fusion: RPG, Jwalk, WinJa, VB, Java, WebSphere/VAJ, Homesite (HTML/ASP Editor), WebSphere Studio	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL, IPSec	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	
Library Management System	
Telecommunications (T1, Frame Relay, etc.)	
T1, Frame Relay	
GIS (ArcView, MapInfo)	
N/A	

Office of Information Technology
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Missouri Lottery Commission

Accomplishments

Automated Numbers Drawing System

Since 1987, the Missouri Lottery's daily drawings, with the exception of Keno, have been conducted "live" with traditional drawing machines and up linked to television stations statewide via satellite from the LETS studio in Jefferson City. Most all of the Lottery's original drawing equipment is more than 10 years old and in need of more frequent maintenance and repair. Mechanical draw equipment is very expensive and all of the Lottery's equipment will need to be replaced within the next few years. The Lottery was faced with the decision to replace its existing drawing equipment or convert to a more cost-efficient, entertaining and secure draw system involving computers and random number generation.

Lotteries that have converted to computerized draws have either purchased turn-key systems or secured software and developed their own computerized draw systems in-house. After researching the costs and benefits of purchasing a system from a vendor (as high as $600,000 with ongoing costs) or producing in-house, we decided to follow the lead of Colorado and Indiana and develop our own system.

Current annual cost for mechanical drawings is more than $207,000. Future drawing equipment replacement costs for traditional drawings would be more than $192,000. Startup costs for the new automated draw system and graphics generation equipment was $90,359. Annual costs for computerized drawings are estimated at $127,000, an annual savings of $80,000. In addition, by converting to the automated draw system, the Lottery will avoid having to spend an additional $50,000 annually to produce and uplink a second daily draw under the old mechanical draw scenario.

The Missouri Lottery's new computerized drawing system software, aptly named ODDS (Online Daily Draw System), was created entirely in-house. The Lottery utilized Dr. Paul Speckman, a professor of statistics at the University of Missouri, to help develop the new automated draw system. In addition, Gaming Laboratories International (GLI), an independent testing lab for gaming regulators, was hired to certify the new ODDS

software and random number generation hardware, along with the new draw procedures and physical security of the draw facility.

Retailer Promotions

Missouri Lottery once again ran multiple promotions during this past year. Winners drawn from past promotions have been selected using very simplistic software. With the completion of the above ODDS software, a new method was developed utilizing the technology and methods learned. The new automated promotional draw system was created to obtain certifiable random winners. This was accomplished with minimal expense and effort, as it was a byproduct of ODDS.

In-House W2G Processing

Using 1099 Pro, Inc. technology, Missouri Lottery now prepares and prints all W2G informational returns to blank paper. In past years Missouri Lottery had to approximate how many pre-printed forms were going to be needed for the returns. Each year this has cost over $1400 or more if the approximation was incorrect. Now the process and printing of these forms are on blank paper to a laser jet printer using 1099 Pro. This program cost an initial $500.00 with a yearly renewal fee of $400.00. This package features the ability to import filer data and information reporting.

Filing Information Returns Electronically

Due to enhanced security measures taken by the IRS, it was requested that all returns be filed electronically rather than on magnetic media. W2G returns, corrections and replacements are now reported to the IRS electronically using communication software and are received at IRS via the FIRE (Filing Information Returns Electronically) System.

Installing New Check Server

Missouri Lottery headquarters and regional offices provide many levels of customer service to players and retailers. One of these services is ticket cashing and payment of prizes. Missouri Lottery has utilized MICR printing technology for security. Printers in place last year were so outdated; they could no longer be supported for parts or service. With the purchase of newer printers, staff took the opportunity to rewrite the old database software into newer technology. The result of this effort, implemented July 2004, was a much more reliable solution for our customer service staff and players.

Support Marketing Recruitment of Casey's General Stores

Expanding the retailer base is critical to meet the revenue expectations of Missouri Lottery. Obtaining corporate level support is key, especially when the corporation has a large number of outlets. Casey's General Stores is one of these. When approaching them with returning to lottery sales, they made a request to receive a new electronic statement to assist in their internal reconciliation. With the help of Missouri Lottery Accounting Department, Casey's account receivable transactions were stripped off the lottery's Account Receivable system and formulated into an electronic statement. Upon meeting approval from the management of Casey's, over 100 retailers were added with the possibility of another 200 within the next year.

Enhancements to "My Lottery" Program

To give visitors to the home page of Missouri Lottery a personal one-on-one experience, the "My Lottery" feature was created in September 2003. This feature is a key component of the WEB business strategies of Missouri Lottery. The purpose is to get players involved and to provide them with special opportunities and benefits, just for visiting our site. This feature will continue to be a focus of our efforts and is a key component of the organization's Customer Relationship Management (CRM) strategies. The following projects are samples of this strategic effort for this period:

- *Bar-coded coupons via the web*

    Missouri Lottery IT staff developed a system to issue bar-coded coupons via the web. The system enables the organization to issue a free play coupon to "My Lottery" members on their birthday. Benefits of the program are:
    - Increases participation in "My Lottery" program, which helps with CRM strategies.
    - Express customer appreciation and increase customer loyalty.
    - Attracts players to Molottery.com, which helps in marketing Missouri Lottery products.

- *Favorite number notification service*

    Developed a system that allows players to register the numbers they like to use when playing Missouri Lottery games. After each drawing the system checks to see if the player's registered numbers won anything and, if so, to e-mail the player indicating the amount they would have won if they played those numbers for that draw. Benefits of the service are:
    - Improves customer satisfaction, which in turn keeps people playing Missouri Lottery games.
    - Increases participation in "My Lottery" program, which helps with CRM strategies.

- *Tell-A-Friend Promotion Module*

    Created a promotion that encouraged existing "My Lottery" members to persuade other players to register with "My Lottery". Benefits of the system are:
    - Increases participation in "My Lottery" program, which helps with CRM strategies.
    - Gives players additional opportunities to win Missouri Lottery prizes, which improves customer satisfaction.

Luckytown Store

Developed the "Luckytown Store" section on www.molottery.com. The section allows visitors to purchase Missouri Lottery premium items online. Benefits of this feature are:
- Generates additional revenue with minimal overhead.
- Helps in marketing Missouri Lottery games.

Code generation software

Implemented code generation software, which increases the productivity of Missouri Lottery programming staff and improves the efficiency of software applications that are developed. The software increases productivity by generating the repetitive code, which is used to build a data access foundation. It improves the efficiency of applications because all data access code is generated using a defined standard. The software also allows programming staff to quickly regenerate data access code when changes are needed. The software can easily decrease the man-hours it takes to write data access code significantly.

Open Source software

The Missouri Lottery continues to embrace Open Source technology where it makes sense. The use of Open Source technology has helped the Missouri Lottery save thousands of dollars over the year. Currently we use the following Open Source products:

- Java – programming language
- Linux – Operating system
- Apache – Web server
- Tomcat – Java application server
- MySQL – Database server
- Eclipse – Java development environment
- And many more.

State-wide CVS server

Missouri Lottery worked with Office of Administration to introduce a state wide CVS (Concurrent Versions System) server. The CVS server is the crucial tool that enables Open Source communities to develop software in a distributed environment.

The objective of introducing a statewide CVS was to enable agencies to share applications, which are common to all state agencies, such as time and attendance tracking applications. A CVS server will also allow agencies to work collectively together to develop common code or applications. Benefits of a state wide CVS server are:

- Saves money because agencies are able share the cost of developing common statewide applications.
- Helps develop statewide standards because applications are developed collectively by agencies.

Peer-to-Peer training

Missouri Lottery worked with Office of Administration to teach a one-day course on how to use CVS. Twenty-two individuals from 7 different state agencies attended the free training. Peer-to-peer training saves the state money because it utilizes the knowledge of

existing state employees to train other state employees. Missouri Lottery is committed to using this form of training whenever possible.

Email and Daily Call Summary Deployment to Field Reps

Lottery field service representatives (LSRs) cover the entire state retailer network providing many valuable services to business owners, employees and players. To support these efforts in the past, field staff relied on faxed documents, numerous hardcopy reports and frequent phone calls to office support staff. In many instances LSRs had to travel to the office to get this information. When Keno was added, there was a significant increase in account load for staff. To facilitate the necessary continued support, the field staff was provided with tablet computers. These computers provide a much wider range of information, reports, special forms, electronic mail services and a means by which the field staff may funnel information back to the office in a timelier manner. The improvements also included syncing the LSR's information with our in–house sales support for better inventory control in the store.

Now with the first year in service we have through feedback and active research made improvements in making the DCS information more user friendly and added information to make the LSR's duties more productive. These additional improvements have given our retail customers much needed information to continue their growth in sales. In addition, LSRs have gained valuable time in the field to so they can spend more quality time with each retailer also helping to increase sales.

Planned Projects

CY05 WEB Initiatives

The Lottery is committed to providing extraordinary customer service to its players, retailers and other stakeholders. The Lottery is also interested in providing information, education and entertainment to citizens through the Internet. The Internet provides a channel which, when properly configured, allows state-of-the-art technologies to give all parties what they want, when they want it. This is a robust environment that allows the Lottery to disseminate as well as collect information. There are many applications and small projects affiliated with this initiative, including E-Business and E-Commerce usage that will streamline business and provide quality service to our customers. WEB projects anticipated include:

- *Retailer Access:* Provide retailers secure access to all of their accounting, sales, prize payment information, retailer application and licensing requests through the WEB.
- *WEB Market Research Initiatives:* Utilize the WEB to provide cost effective and faster research information that will allow the Lottery to improve product offerings, promotions and services.
- *Dedicated WEB Server:* The WEB server hosted by MORENET for state agencies is becoming a problem for WEB services deployment and response time. A dedicated server environment has been procured and will be implemented in the early months of CY05.

Ongoing Marketing Efforts

Based on past experience with the diverse environment of the Lottery industry, it is both anticipated and expected that a number of system requirements both large and small will be required in the coming year. These systems can and may be as simple as changing existing game matrixes to adding complete new products to the mix of Lottery offerings. These changes are inherently diverse and unpredictable as the Lottery industry is ever changing and reactionary to trends, legislation and marketplace. As in the past year, a number of marketing initiatives will involve the world-wide-web and will include use of surveys, second-chance draws and other promotions.

Winner Awareness Initiative

Lottery communications and marketing personnel frequently are asked for information regarding specific prize winners, regionalized winning tallies and many other pieces of information regarding lottery winnings. These requests come from the media, retailers, players, government officials, etc. and require varied amounts of effort to compile. This initiative was started in CY04 and should be completed early in CY05. The end result will be more effective and timely reporting.

Accumulated Demand

The Lottery has a small IT staff and must rely on the ability of staff to be diverse and flexible in the technology disciplines used within the organization. The limited staff size can translate into lower productivity periods when there is turnover and the need arises to train new staff. There is currently a backlog of approximately 1.5 man-years of service requests and projects. This backlog has increased slightly from last year's reported 1.0 man-year primarily because a number of projects were addressed that were not previously identified.

General Department Profile (2004)

Department Name		
Missouri Lottery Commission		

Street Address	City	Zip
1823 Southridge Dr	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4050	*(573) 751-5188*	www.molottery.com

Department Director
Jim Scroggins

Number of FTE (entire department)	Approximate number of citizens served
176.5	*5.6 million*

Agency Mission (brief statement)
To maximize revenues for public education through the creation and sale of fun and entertaining products consistent with the highest levels of service, integrity and public accountability.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Lottery Commission		

Department CIO Name		
Mike Wankum		

Street Address	City	Zip
1823 Southridge Dr	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 526-7492	*(573) 751-5188*	*wankum@molottery.com*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)		
NASPL Technology Committee		

IT Division Name	Website URL
Administration – Data Processing	*www.molottery.com*

Number IT FTE (located in central office)	Number IT FTE (located in field)
19	*0*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Wanda Hawkins	*751-4050*	*hawkiw@molottery.com*

Privacy Officer Name	Phone No.	E-mail

ITAB Alternate Name	Phone No.	E-mail
Ron Murphy	*751-4050*	*murphr@molottery.com*

SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
Missouri Lottery Commission	

Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)

Mainframe	*Stratus Continuum 1225 with VOS*
PC Servers	*Compaq Proliant with Novell and NT*
Mid-range	
Networked	

Desktop (Windows XP, 3270, Linux, etc.)

PC	*Windows 2000, XP*
Dumb terminal	*VOS*

Network Protocols (TCP/IP, SNA, IPX, etc.)

TCP/IP, X25, IPX

Internet Connections (DSL, Cable, Dialup, etc.)

MAN

Internet Service Provider (MORENET, AOL, etc.)

MORENET

Security Provisions (packages, anti-virus, filters)

Network	*Symantec Anti-Virus*
Desktop	*Symantec Anti-Virus*
Internet	*Symantec Anti-Virus*

Help Desk Packages (Magic, GWI)

N/A

Database Management Systems (DB2, Oracle, SQL, etc.)

Oracle, SQL

Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)

COBOL, FMS, SGI/DBQ, Oracle Forms & Reports, Forte, Dreamweaver, TOAD, ANT, Java, JSP, Tomcat, SAS (PC)

E-Mail Packages (Exchange, Lotus Notes, etc.)

Novell Groupwise

Encryption Packages (SSL, PGP, etc.)

N/A

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
CVS
Telecommunications (T1, Frame Relay, etc.)
T1
GIS (ArcView, MapInfo)
ArcView, MapInfo

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Department of Mental Health

Accomplishments

CIMOR

Despite fiscal and technical challenges and after having to replace an under-performing contractor, the Department (DMH) is nearing the completion of the Customer Information Management, Outcomes & Reporting (CIMOR) system. CIMOR will replace a set of 10 – 35 year old systems that manage consumer and provider information, services, and payment processing. CIMOR will add new functionality including security and standard electronic transactions that meet HIPAA requirements. This is a very complex system that would be a challenge to any organization or development group.

DMH is now contracting with Rose International to assist in completing the development, configuration, and deployment of this new web-based application. Together we have completed work on full requirements definition, system design including prototypes, and code to support the first three of the five functional areas. Initial testing and training have provided very positive feedback about the product. Significant work has also been completed for technical planning and deployment, and all other activities associated with a large-scale software development project.

The system will be delivered in 2 releases: March 2005 Foundation Release and early FY06 (July-August) Consumer & Services Release.

Pharmacy System Implementation
The accurate management of medication in our DMH hospitals is a critical function both clinically and financially. In 2004 DMH fully implemented a statewide pharmacy system (QuadraMed) to replace various systems that were used at seven hospitals operated by the Division of Psychiatric Services. This system allows us to manage the delivery of medications more consistently and accurately across our department and will enable division-wide reporting and analysis of pharmacy data. This software will be integrated with the CIMOR system.

Consumer Banking Implementation

The Department of Mental Health is responsible for managing accounts for thousands of our consumers in long care treatment and habilitation programs. Last year we began the replacement of our outdated consumer banking application with a commercial package, FundWare. A pilot installation was completed, in October 2004 at Fulton State Hospital where it is now in operation. A statewide training plan is underway to install and implement the FundWare application at all DMH facilities by the end of FY05. This software will be integrated with the CIMOR system when it is deployed.

Legacy Bridge Project

In order to begin using HIPAA required electronic transactions prior to the implementation of CIMOR, DMH initiated and completed the Legacy Bridge Project. This project augments current DMH legacy systems to send and receive standard transactions with external partners and payers. Designed around the Microsoft BizTalk and HIPAA Accelerator products, DMH IT staff built solid solutions in record-time for creating and consuming standard transactions for claims, remittance advice, and claim status. Since the start of production in October 2003, the Legacy Bridge project has processed in excess of 2.7 million claims, $250 million dollars, while improving data quality and reducing claim rejection rates to less-then 1%. Much of the work of the Legacy Bridge project will become part of CIMOR.

DMH Security Office

DMH appointed a Chief Security Officer who is also part of the IT organization. The Department is currently conducting the mandatory HIPAA Security training for all DMH staff, contractors, volunteers, interns and trainees.

In 2004, DMH promulgated three new Department Operating Regulations (DOR's) to bring the DMH into compliance with the Federal HIPAA Security Regulation. These new regulations encompass information security incidents, security maintenance and password reset verification procedures.

In addition, DMH has made significant effort to improve the department's technical architecture in order to meet HIPAA technical security requirements. These implementations have started taking place and will continue throughout 2004 and 2005.

Continuity of Business/Continuity of Government

The Department has begun work on a Central Office disaster/business continuity plan. This project involves detailed planning for alternate worksites for staff after an event, determining which computer systems are essential and in what order they will be brought back on line, communication needs, identifying essential partners, records and documents that will be required to reconstitute the DMH, and what risks the Department might face in the event of such a disaster. Each of the DMH facilities is also developing their own business continuity plan in coordination with the departmental effort.

Voice over IP

The Higginsville Habilitation Center was one of the first state agency locations to implement a Voice-over-IP (VOIP) solution, integrating the data and voice networks into a common infrastructure, and setting the basis for advanced functionality and management for future DMH phone systems.

Medical Technologies

A pilot project is underway at Southeast Missouri Mental Health Center in Farmington for the use of wireless technologies in the delivery of physician services to our consumers. In addition, research has been done on medical dispensing and delivery systems using bar-code technologies, which will help form the basis, along with other technologies, for the delivery of an electronic medical record in the future.

Planned Projects

- Complete implementation of CIMOR statewide, including use by DMH contract providers and all DMH facilities.
- Deactivation of all legacy/mainframe systems in the fall of 2005.
- Develop improved reporting capabilities for the pharmacy system including local reporting and a department-wide pharmacy data mart.
- Develop the new DMH Data Warehouse centered on CIMOR data. This includes designing an Operational Data Store for operational reports and a true analytic processing area that will provide advanced decision support.
- Work with OA-DIS to share network management and server housing.
- Update and expand DMH wireless capabilities.
- Complete department-wide security training and promulgate additional security regulations.

Accumulated Demand

Several IT project requests are waiting for resources. These include:
- Improved document management.
- A full evaluation of Voice Over IP for several DMH phone systems.
- Improved Internet management.
- Extension of CIMOR to provide a full range of clinical assessments and other clinical functionality.

General Department Profile (2004)

Department Name		
Missouri Department of Mental Health		

Street Address	City	Zip
1706 E Elm St	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-4122	*573-751-8224*	*www.dmh.mo.gov*

Department Director
Dorn Schuffman

Number of FTE (entire department)	Approximate number of citizens served
9,700	*140,000*

Agency Mission (brief statement)
Working side by side with individuals, families, agencies, and diverse communities, the Department of Mental health establishes philosophy, policies, standards and quality outcomes for prevention, education, habilitation, rehabilitation, and treatment for Missourians challenged by mental illness, substance abuse/addiction, and developmental disabilities.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Department of Mental Health		
Department CIO Name		
Gary Lyndaker		
Street Address	**City**	**Zip**
1706 E Elm St	*Jefferson City*	*65101*

CIO Phone Number	**CIO Fax Number**	**E-Mail Address**
573-751-9121	*573-526-6033*	*gary.lyndaker@dmh.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Project Management Institute (PMI)

IT Division Name	**Website URL**
Office of Information Systems	*http://www.dmh.mo.gov/offices/ois*

Number IT FTE (located in central office)	**Number IT FTE (located in field)**
73	*71*

Total $$ value of FY05 IT requests submitted to OA Budget and Planning	**Total $$ value of FY05 IT requests funded**
$13,652,138	*$13,652,138*

Security Officer Name	**Phone No.**	**E-mail**
Ed Meyers	*573-751-8095*	*ed.meyers@dmh.mo.gov*
Privacy Officer Name	**Phone No.**	**E-mail**
Janet Conboy (Acting)	*573-751-8076*	*janet.conboy@dmh.mo.gov*
ITAB Alternate Name	**Phone No.**	**E-mail**
Dean Williams	*573-526-4098*	*dean.williams@dmh.mo.gov*
SDC Steering Committee Rep Name	**Phone No.**	**E-mail**
Michael Marcus	*573-526-5668*	*michael.marcus@dmh.mo.gov*

Department Technology Profile (2004)	
Department Name	
Missouri Department of Mental Health	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*purchase computing services from OA*
PC Servers	*IBM xSeries (x440, x360, x350, x342, x335, x330, x240), 8500R*
Mid-range	*IBM AS/400 (500,620,720,S20,170), IBM SP (UNIX AIX)*
Network	*CISCO 6500, 7200, 3600, 2610, 2612*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP, DELL Optiplex GX 150*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
MORENET via MAN connection to OA	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-Virus (server), Antigen (e-mail)*
Desktop	*Norton Anti-Virus (desktop)*
Internet	*PIX 520 Firewall, CISCO Secure IDS (Intrusion Detection Sensor),*
Help Desk Packages (Magic, GWI)	
Heat	
Database Management Systems (DB2, Oracle, SQL, etc.)	
SQL Server, Oracle, IMS, DB2, DB2-400	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Visual Studio .NET including Microsoft Reporting Services	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL, Triple DES, MD5	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Source Safe
Telecommunications (T1, Frame Relay, etc.)
DS-3, T1, Frame Relay
GIS (ArcView, MapInfo)
ArcView

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Department of Natural Resources

Overview

The Department of Natural Resources' (DNR) mission is "to improve the quality of life and economic well being of all Missourians by fostering the prudent use and protection of our air, land, water, cultural, and energy resources." Core business functions that enable mission accomplishment include resource regulation and enforcement, service delivery, resource planning, management and support services. The department is committed to enhancing service levels by improving access to department staff and information.

The department's information technology environment exists to support the core business functions and consists of mainframe and mini computers, wide area networks and a variety of personal computers (PCs). The State Data Center (SDC) maintains the mainframe computer primarily utilized by the department. The SDC-managed mainframe hosts one significant DNR software application - our Water Pollution Control Program's Water Quality Information System (WQIS). The WQIS processes information related to waste discharge, water quality monitoring and assessment, and facility data. Remote connections to other mainframe computers such as the United States Environmental Protection Agency's National Computer Center are also used to process large data sets.

Mini computers and PCs are used to support department Geographic Information System (GIS) activities and laboratory analysis of water and air samples. Wide area networks service approximately 2,000 department employees by providing the data sharing links for the department's program, regional and district offices. Also, the PCs are an integral part of the network environment and are used for a wide variety of automation activities such as word processing, data analysis, graphics tasks, and to access network and mainframe applications.

The automation environment implemented and maintained by the DNR facilitates the department's ability to promote an understanding of natural resource issues, advocate public debate and encourage environmental stewardship. It also promotes responsible economic development by providing access to information regarding environmentally safe practices.

Accomplishments

Current initiatives and accomplishments have occurred in four major areas: infrastructure, Internet, GIS and software systems. Also, all initiatives and accomplishments are interdependent. The DNR could not implement software systems and Internet capabilities without an appropriate infrastructure, and many software systems have GIS components and must be "Web-enabled."

Infrastructure

Commencing with fiscal year 1996, the Missouri legislature approved several appropriation requests that support DNR automation initiatives. Of these, a FY1998 request focuses on the department's automation infrastructure and addresses two primary goals. First, the department's automation environment must be implemented and maintained in such a manner that it is ready to support emerging business needs. Second, the department must manage and control the cost of implementing and maintaining our data processing environment. In addition, the DNR continues to collaborate with the United States Environmental Protection Agency (USEPA) to address electronic reporting of environmental data. These on-going initiatives will facilitate the consolidation of reporting requirements, increase Internet access to data, reduce the reporting cost for industry and improve the integration of environmental data.

FY2004 automation infrastructure initiatives included cabling infrastructure items, network management tools, servers, and support staff training. Cabling infrastructure activities remained focused on the department's 100mbps-ethernet local area network (LAN) environment. Network responsiveness and reliability were improved by increasing capacity and fail-over capabilities, and userid and password authentication services were implemented to enhance security when field and mobile staff utilize dial-in access (VPN). Our backup and recovery system was upgraded to meet continuous growing business data requirements and to facilitate the ability to manage our data in a timely and reliable manner. Internet mail gateways were also upgraded to process a continuously increasing volume of Internet mail. Finally, communications equipment, LAN wiring, a server and an Uninterruptible Power Supply were implemented in the new Lewis and Clark State Office Building.

These accomplishments have increased data transfer capacity between department entities, enabled the implementation of robust department-wide Internet connectivity, and "set the stage" for implementation of department-wide software systems. The greatly improved system responsiveness will facilitate enhanced departmental service.

As the department's communications infrastructure continues to evolve, utilization must be known to plan for growth and systems must be reliable. Therefore, during FY2004 the department continued to enhance network capabilities by upgrading network management tools. These tools enable the department to monitor communications equipment and perform capacity monitoring and trend analysis of statewide data circuits. These new capabilities compliment previous efforts that included relational database

(DB2) and Notes performance management tools; and remote software installation, configuration and auditing capabilities.

Also, during FY2004 the department's network management "tools" detected and prevented approximately 313 virus incidents per day and "filtered" 1.2 million incidents of "spam" mail. Filtering capabilities also continue to be used to prohibit access to inappropriate Internet sites. All network management capabilities support quick problem diagnosis, enables software license metering, extends fault-tolerant capabilities, and improves system reliability. Implementation of appropriate tools will continue to enhance the department's network management capabilities during the coming years.

With the growth of PCs, networks and communications requirements throughout DNR, the department needs to attain the expertise required to integrate and maintain the resultant infrastructure. Training is also required for specific products such as the network management software, the firewall and the e-mail system. Therefore, during FY2004, 27 departmental automation support personnel attended 59 technical courses.

In addition to the training our technical support staff receives, it is also important that we train our employees to use the automation tools provided to them. Therefore, employees and supervisors work together to determine which courses are appropriate. During FY2004, approximately 132 department employees attended training for topics such as Microsoft Word, Excel, Access and PowerPoint. Most training accomplished during FY2004 was held at the department's computer training facility, and training in all areas will continue to be a priority during the coming years.

Internet

The department's dynamic web environment implemented to support public access needs continued to grow during FY2004. This environment has grown from approximately 50 web pages of information in early 1996 to over 20,000 pages currently - including a 66 percent increase during FY2004. The public now accesses an average of over 1.5 million department web pages per month - an increase from the less than 100,000 pages per month accessed during FY1999 and a 50 percent increase during FY2004. Currently, the department furnishes databases, technical bulletins and fact sheets to the public via the Internet and we continue to receive requests from the public to provide additional Internet accessible publications and news releases. Enhancements implemented during FY2004 include additional state park campsite amenity information, hazardous waste and water protection interactive maps and stakeholder working documents to facilitate communication and information sharing.

Ultimately, the department's web environment will become an environmental information system which will support compliance assistance by facilitating the development of industry sector profiles that will highlight the industries and facilities that are subject to various cross-media requirements. Goals include providing Internet access to cross-linked environmental data, consolidating the reporting requirements of regulated facilities and supporting a facility-wide approach to permitting, enforcement, and

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inspections. The cross-linked information will strengthen decisions made within the department and impact the decisions of others. It will facilitate an improved understanding of resource issues and informed decision making. Instead of going to numerous programs and agencies for information concerning one entity, the public and staff will be able to access our Internet site and link multiple air, soil and water issues to that particular entity.

The web provides a forum for exchange, an opportunity to collaborate and communicate with the many stakeholders involved in natural, energy and cultural resource use, protection and preservation. Access to environmental data will act as a catalyst for citizens, facilities, and organizations. It will encourage them to consider the environmental impact of their decisions and actions, facilitate public debate on natural resource issues and encourage improvements in the data collected.

Geographic Information Systems

The DNR recently set the example for others by publishing some of the highest quality GIS data and documentation available in the state. The DNR published more statewide data sets during fiscal year 2004 than all other Missouri State Government entities combined. Eighteen DNR data sets were published versus fifteen data sets published by all other entities during the same time period.

Additionally, DNR GIS staff have implemented a GIS data storage and delivery service that allows us to store massive volumes of spatial data in our DB2 relational database management system. The delivery service makes data available to our GIS users at approximately twice the speed of file-based spatial data. More importantly, this technology allows us to integrate DB2-based business systems with geographic information systems. This significant achievement provides the DNR with the capability for implementing high-performance enterprise systems that make both spatial and non-spatial data available to the whole department and to our external stakeholders.

Software Systems

The department's Management Information Systems software application team completed more than 60 application modification or development requests. Following are several examples.

- Enhancements to the department's Statewide Advantage for Missouri (SAM) II financial reports have proven beneficial. These analytical tools are easy to use, pull together many different kinds of financial data and provide graphics to communicate more than just numbers.
- The DNR was able to meet USEPA National Emissions Inventory reporting requirements and attain our department goal of collecting high quality geo-referenced facility data by adding a GIS component to our Missouri Emission Inventory System (MoEIS). This system provides information to the USEPA on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants.

The Operator Certification system is used to help manage the training and certification of Drinking Water and Wastewater System operators, including Concentrated Animal Feeding Operations as set forth in the Missouri Clean Water Law. The conversion of our Operator Certification application to a client/server system provides increased functionality; maximizes system resources, improves data entry capabilities and stores the data in IBM's DB2 database system to take advantage of a relational design to eliminate data redundancy. The conversion also provided the opportunity to integrate the Operator Certification system with our Water Quality Information System (WQIS).

The Water Protection and Soil Conservation Division (WPSCD) utilized consultant services to accomplish a system analysis project for a web enabled system that would enable our Soil and Water Conservation Program and their conservation district offices to report and track their data via the Internet. The WPSCD also completed Phase 1 of the Clean Water and Drinking Water State Revolving Fund (SRF) system. This system automates the accounting functions of the department's Clean Water and Drinking Water State Revolving Fund (SRF), and will assure proper accounting by providing essential fiscal controls and procedures.

The department and local agencies in St. Louis, Kansas City and Springfield operate approximately 190 ambient air quality monitoring instruments at 66 locations in our state. The intent of this network is to determine the nature of the state's air quality, and the location and severity of any air problems. To facilitate easy, real-time public access to air pollutant information, the department's Air Pollution Control Program (APCP) initiated the development of the Air Quality Data System (AQDS) during FY2003. The AQDS presents real-time ozone readings collected from these monitors on Web pages, but it is designed to also easily accommodate various types of air pollutants. Because this system is very important to Missourians who have health conditions that would be affected by various air pollutants, the APCP enhanced this system during FY2004.

Planned Projects

All of the above listed infrastructure, Internet, GIS and software initiatives must, and will, continue to evolve. Specifically, e-government (i.e., web) projects will ultimately simplify citizen, business and government interaction. The department's efforts will focus on reducing our customer's cost to file "hardcopy" returns and forms to meet regulatory requirements. The department will also realize improved processing time and cost savings through reduced labor previously required to enter data and process paper. Hence, overall benefits will include more efficient department operations and improved customer satisfaction.

Geographic Information System
The department will continue to develop a centrally managed Geographic Information System capable of serving the data and mapping needs of the department and its constituents. It will enable the department to address spatial technology issues from a

global perspective and will facilitate improvements in the way the department operates by providing the information the department collects in formats that will increase its availability, understanding and usability by stakeholders and decision-makers. The system will be the focal point for ongoing data system integration efforts, and will facilitate a better understanding and management of our natural and cultural resources by providing the department and the public with interactive mapping capabilities through the World Wide Web. The development and implementation of this system will be a key to turning the vast stores of departmental data into useful and easily comprehensible knowledge.

GIS personnel will also continue to serve on the departmental *Biomass Coordination Group,* which is dedicated to finding ways to better utilize natural resources which are frequently regarded as waste products; and they will remain engaged in *State Water Plan* initiatives which strive to make watershed planning tools available to stakeholders. The tools will rely heavily on GIS data and technology.

Communications

From a statewide perspective, communication needs resulting from data center consolidation efforts, the rapid growth of client-server applications and the deployment of multimedia services mandate the need for a communications-computer environment designed to integrate robust corporate data bases with an evolving, powerful PC-based multitasking environment. To address this need and to facilitate cost-effective and efficient operations, the DNR will continue to address the infrastructure components mentioned previously and will aggressively pursue partnerships with other state and federal agencies.

Although reported spam decreased substantially during the past year due to various initiatives, spam contents are becoming more sophisticated and scams/phishing schemes are a growing percentage of total spam. This will increase the likelihood that spam will get past current automated filters. Therefore, automated detection will be improved with an update of the Dynamic Antispam Service during FY2005.

Software Projects

The DNR is attempting to adhere to the strategy of utilizing WebSphere/JAVA tools for enterprise application development activities. Additionally, an integral part of the department's communications-computer environment is a standard hardware and software environment. All emerging department standardization strategies will adhere to evolving statewide standards, and we attempt to ensure that all projects personify the statewide strategy of focusing on access, optimization and innovation when providing services and making information readily available and easily accessible to the Missouri public. The department's goal is to ensure that resources are being shared and used to their maximum potential and solutions are being implemented in a manner that provides the greatest overall benefit.

Accumulated Demand

In order to increase efficiency and reduce costs, the department needs to develop a long-term strategy to satisfy reporting requirements. Factors to consider include how well available reporting tools meet the business requirements of non-technical users and application programmers, total cost of ownership and the long-term viability of the recommended tools.

The public and the department would also benefit from an enterprise document management system. Documents in this system could be viewed simultaneously by multiple staff and the public via the Internet. The system would eliminate the need to update multiple web pages, tie related information from different sources together and make it easily available to the public, and save large amounts of electronic and physical filing space.

Maturation and enhancement of current system capabilities are imperative as the department focuses on quality and delivery of excellent, reliable service. The department has also identified over 30 applications that should be web-enabled to support public access requests. Despite inadequate resources, the DNR will continue to strive to implement and maintain a robust, evolving infrastructure to meet this demand. These public access needs must be supported and department employees must have reliable communications-computer systems to facilitate quick decisions and actions as they strive to fulfill the DNR mission.

General Department Profile (2004)

Department Name		
Natural Resources		

Street Address	City	Zip
205 Jefferson Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
751 6525	*751 7749*	www.dnr.mo.gov

Department Director
Mr. Steve Mahfood

Number of FTE (entire department)	Approximate number of citizens served
2012	*5,000,000*

Agency Mission (brief statement)
The Department of Natural Resources' mission is to improve the quality of life and economic well being of all Missourians by fostering the prudent use of our air, land, water, cultural, and energy resources.

Department CIO and IT Division Profile (2004)

Department Name		
Natural Resources		

Department CIO Name		
Chris Wilkerson		

Street Address	City	Zip
205 Jefferson Street	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
751 6525	*751 7749*	*Chris.wilkerson@dnr.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement *(i.e., NASCIO – serve on architecture standards committee)*

IT Division Name	Website URL
Division of Administrative Support, *Management Information Services Program*	www.dnr.mo.gov/das/mis

Number IT FTE (located in central office)	Number IT FTE (located in field)
30	*Approximately 40*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
0	*0*

Security Officer Name	Phone No.	E-mail
None		
Privacy Officer Name	Phone No.	E-mail
None		
ITAB Alternate Name	Phone No.	E-mail
Mr. Jim Myers	*751 6525*	*Jim.myers@dnr.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail
Chris Wilkerson	*751 6525*	Chris.wilkerson@dnr.mo.gov

Department Technology Profile (2004)	
Department Name	
Natural Resources	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Windows 2000*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Via the SDC	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Server = McAfee, Firewall = Checkpoint*
Desktop	*McAfee*
Internet	*Securemail = Tummbleweed & WebSense*
Help Desk Packages (Magic, GWI)	
GWI	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2 (primary), ORACLE & SQL required for specific "products"	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Advantage:Gen & WebSphere	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
SSL	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

PVCS
Telecommunications (T1, Frame Relay, etc.)
T1, MAN, DS3
GIS (ArcView, MapInfo)
ArcView, ArcInfo, ArcSDE, ArcIMS

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Department of Revenue

Accomplishments

The department launched its upgrade of the **Computer Assisted Collections System (CACS)** in the Division of Taxation and Collection. The project includes two parts. The first part was realized this year in the Strata ranking tool, which identifies delinquent accounts with a higher likelihood of collection and the appropriate method for approaching this debt. This implementation, along with some business process reengineering, has helped the state realize nearly $22 million in increased collections from April to October 2004. We have documented the second phase under "Planned Projects" below.

The department also developed and implemented a new internal **Record Archival System.** DORRAS is used to track boxes of documents stored in the department's warehouse. The new system replaces an old archive system as well as a document number lookup system once maintained by the Division of Taxation and Collection.

Also in the area of enhancing and automating **internal processes,** the department converted its legal and investigative case management systems from the mainframe to Intel blade servers, and are developing systems for performance management tracking, project tracking, automated leave request and security awareness.

In the Division of Motor Vehicle and Driver Licensing, the department installed a new **document imaging system** to store records in several drivers' licensing units. By enabling departmental employees to retrieve scanned documents within about three hours of their storage, customer service has been dramatically enhanced.

Standards for the department's mainframe applications were published on a MS SharePoint server.

Planned Projects

The second portion of **CACS** includes an upgrade to the department's existing collections system from mainframe-based to web-based. This move will allow many more users access to the system, and will include an Internet application to permit taxpayers to set up payment plans or even pay delinquencies online.

The **Tax Compliance System (TCS)** is an important implementation that began in October 2004. The first portion of the TCS employs data mining techniques and several data sources to identify non-filing or under-filing taxpayers. The second part of the project will implement a system to manage the department's caseload of noncompliant taxpayers. This case management system will use sophisticated business intelligence to locate, rank, and monitor potential noncompliance leads.

Moving forward with its intent to implement **Mobius,** a committee developed standards and procedures for use of the data retrieval software.

The department helped draft a statewide contract for **interactive voice response (IVR)** systems and purchased an IVR system in 2004. When fully implemented, the system will allow suspended drivers to access their driving records and obtain instructions for reinstating their licenses, all by telephone. Callers will be able to use speech or touch tones to interact with the system.

General Department Profile (2004)

Department Name
Department of Revenue

Street Address	City	Zip
301 West High Street	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-4450	*573-751-7150*	*www.dor.mo.gov*

Department Director
Carol Russell Fischer

Number of FTE (entire department)	Approximate number of citizens served
1,919	*5 million*

Agency Mission (brief statement)
The Department of Revenue is the central collection agency for all state revenues. The primary duties of the department are the collection of taxes, titling and registering motor vehicles, and licensing drivers throughout the state.

Department CIO and IT Division Profile (2004)

Department Name		
Department of Revenue		
Department CIO Name		
Jim Weber		

Street Address	City	Zip
301 West High Street	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-3100	*573-522-9795*	*Jim.Weber@dor.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)		
PMI		

IT Division Name	Website URL
n/a	*www.dor.mo.gov*

Number IT FTE (located in central office)	Number IT FTE (located in field)
126	*3*

Total $$ value of FY04 IT requests submitted to OA Budget and Planning	Total $$ value of FY04 IT requests funded
$2.5 million	*$2.5 million*

Security Officer Name	Phone No.	E-mail
Jim Davenport	*573-522-9819*	*Jim.Davenport@dor.mo.gov*
Privacy Officer Name	Phone No.	E-mail
Jim Davenport	*573-522-9819*	*Jim.Davenport@dor.mo.gov*
ITAB Alternate Name	Phone No.	E-mail
Kay Dinolfo	*573-751-4584*	*Kay.Dinolfo@dor.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail
Jim Weber	*573-751-3100*	*Jim.Weber@dor.mo.gov*

Department Technology Profile (2004)

Department Name	
Department of Revenue	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*z/OS (SDC)*
PC Servers	*Novell Netware 6.0, Windows NT, Windows 2000*
Mid-range	*AIX*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 95/98/NT Workstation/2000*
Dumb terminal	*Hummingbird 3270 emulation*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA, IPX, NetBios	
Internet Connections (DSL, Cable, Dialup, etc.)	
DSL; dialup via Shiva	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee*
Desktop	*Network Associates McAfee VirusScan*
Internet	
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
IDMS, DB2, Oracle, SQL, MS Access	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
WebSphere (Java), CICS, COBOL, .Net, ADSO, Visual Basic, Lotus Notes Domino	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
MS Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL (Internet)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Visual Source Save, Librarian (Mainframe)
Telecommunications (T1, Frame Relay, etc.)
Frame Relay
GIS (ArcView, MapInfo)
ArcView

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Office of the Secretary of State

Accomplishments

Help America Vote Act – Statewide Voter Registration Database

In March 2004 the Office of the Secretary of State awarded a contract to MAXIMUS for the development of a statewide voter registration database. The Help America Vote Act requires each state to maintain a central list of all voters registered in the state and to use that list to run national elections. The system must be in place by January 1, 2006. The database must interface with state drivers' license records, state death records, and state felony records. The system was piloted during the November 2 election in 3 counties. A second pilot will be conducted in April of 2005 in 8 counties. When completed the database will be used by 116 election authorities to register voters, print poll books, manage poll workers, manage precincts, develop ballot styles, manage petitions, and perform other election activity.

Business Services Knowledge Base

A number of enhancements were made to the Business Services Knowledge during 2004. Fictitious filings were made available via the Internet on May 18, 2004. Certified copies of corporate records were made available via the Internet on October 19, 2004. Limited Liability Company filings were made available via the Internet during December 2004.

Additional functionality was added to the Knowledge Base system to handle Notary Public registrations. That functionality was moved into production on August 28, 2004. Notary training via the Internet was made available on November 5, 2004.

Proposed Rules E-Mail Notifications

The Administrative Rules Section of the Missouri Office of the Secretary of State is responsible for publishing administrative rules and regulations. The Secretary of State publishes the *Missouri Register* twice a month to keep Missourians informed of pending rules and regulations. After the rules have been adopted, they are codified and printed in the *Missouri Code of State Regulations*. The *Code of Regulations* is a 14-volume, loose-leaf printed set that is updated monthly.

In May 2002 the Secretary of State began a project to automate the process utilized by the Administrative Rules Section to review and publish rules. In November of 2002 work began on a system that would ultimately; 1) allow Administrative Rules staff to log proposed rule information through a web interface, automatically generate e-mail notifications concerning proposed rules, and allow Missouri citizens to subscribe to the e-mail notifications through a web page; 2) allow Administrative Rules staff to import rules into a database; 3) automate the publishing of the *Missouri Register* and the *Missouri Code of Regulations* in both print and electronic media; and 4) allow agencies to submit rules through a web page.

In November of 2003 the first release of the system was put into production. The e-mail notification capability was put into production in December 2003. During the 2004 calendar year, phase 2 of the project, the ability to import rules into a database. was implemented. Testing on phase 3, publishing of the *Missouri Register* and the *Missouri Code of Regulations*, is in progress.

Online Coroner Records

In June Secretary of State Matt Blunt made available online the *Coroner's Inquest Database.* The database currently offers the records of Andrew, Cape Girardeau, Clinton, Perry, St. Francois, and Stoddard counties, dating from 1842 to 1932. Nineteenth century records from the City of St. Louis and the St. Louis Medical Examiner are also available.

The adventure of making a life in Missouri was often met with harsh reality. Missouri could be a rough place to live. Personal and ethnic violence, industrial accidents, the improper use of drugs, the suicidal loneliness of an immigrant or the desperation of widowhood could lead to violent death. Scholars and family historians can now locate information about Missouri citizens who died under mysterious or accidental circumstances during the nineteenth and early twentieth centuries. The stories involved are often tragic and sad, while others make for great drama and interesting detective work.

Blunt said, "This database offers researchers and genealogists many unique and interesting insights into Missouri's past, including the difficulties and dangers of living in a much more turbulent society. The earliest reports, before the time of standardized forms, are engaging and colorful narrative accounts detailing the cause of death. Many tidbits of information, from family relationships and neighborhood history to topics of public health and social violence, can be deduced from the coroner's records. The information contained in these records may not be available elsewhere, making them incredibly valuable for research."

Soldiers Database

In March Secretary of State Blunt made available a new *Soldiers Database* that includes more than 576,000 Missourians who served in the military from territorial times through World War I. The new database builds on the successful *World War I Service Cards*

Database, which debuted to national attention over two years ago and has received more than 234,000 web requests.

The *Soldiers Database* includes 576,293 entries for twelve wars and military engagements in which Missouri soldiers took part. These range from well-known wars, such as the War of 1812, the Mexican War, the Spanish-American War, and World War I, to the battles that were peculiarly Missourian, including the Heatherly War of 1836, the Mormon War of 1838, and the Iowa (Honey) War of 1839.

The bulk of service cards, over 380,000 of them, record the fractured history of our state during the bloodiest of all American wars – the Civil War. In April 1861 the deepening sectional crisis over the expansion of slavery erupted into open warfare. In southwest Missouri the battle at Wilson's Creek became the second major clash after 1st Manassas or Bull Run. More than 540 men were killed and over 1,600 wounded in the six-hour battle. Information about those men is now readily available in the Soldiers Database, whether they fought for the Union or for the Confederacy. Although major battles in the state ended after Wilson's Creek, the remainder of the war in Missouri saw frequent bushwhacking activities and violent skirmishes. Military organizations such as the Missouri State Militia (M.S.M.) and the Enrolled Missouri Militia (E.M.M.) were organized to maintain order within the state. Nearly 10,000 men served in the M.S.M., and about 52,000 in the E.M.M. In total, over 109,000 Missouri men served the Union, while some 30,000 fought with the Confederacy. History books record their cumulative efforts, but the *Soldiers Database* offers a more personal look at these men who died for their cause.

The database can be searched by an individual's name and, a bonus for military historians, by fighting unit. It can also be analyzed by war. Images of the original service card(s) are linked to most database records. A brief summary of each war also appears on the website.

Missouri Online Library List - MOLLi
The Missouri Online Library List makes available to the public a database of Missouri public, academic, special, institutional, and school libraries. The first release of the database provides library contact information, library hours, and districts served. Future releases will provide library services. MOLLi is the first phase of a Library Development Database. Future phases of the Library Development Database will allow libraries to update Molli online and will include a grant management piece.

Bibliostat Collect
Bibliostat Collect is a web-based data collection system that allows libraries to submit annual report information online. The system includes a number of edit checks that will reduce the amount of time required by Library Development to proof reports submitted by libraries prior to submission to the federal government.

Secretary of State ExtraNet

The first release of the Secretary of State ExtraNet allows county election authorities to submit election night results online through a secure connection and to view duplicate voter information online. The site also allows election authorities to view other election information.

2003 – 2004 Official Manual "Blue Book"

With the 2003 – 2004 Official Manual additional online features were added for easier access. New features included the ability to search the manual by text and to search the personnel section by Agency or Last Name or Last Name and Title.

Infrastructure

A number of measures were implemented to improve the security of the Secretary of State's digital assets.

Planned Projects

Infrastructure

The Secretary of State continues to upgrade the communications and server components of its local area network. In addition, measures are being taken to further improve the security of the network.

Other Planned Projects

Other planned projects include the following:

- Administrative Rules – Releases 3 and 4 that will automate the publishing of the Missouri Code and Register and allow state agencies to submit proposed rules and rulemakings online.
- Securities Enforcement System – an information system that will track enforcement cases handled by the Secretary of State's Security Division.
- Records Management System – an information system that will track state agency records stored at the Secretary of State's office.
- Archive Collections Available Online – the Secretary of State will continue to make enhancements to the SOS website providing additional collections online.

Accumulated Demand

Several projects of various size and complexity are outstanding.

General Department Profile (2004)

Department Name
Missouri Office of the Secretary of State

Street Address	City	Zip
600 West Main Street	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4936	*(573) 751-2490*	*www.sos.mo.gov*

Department Director
Matt Blunt

Number of FTE (entire department)	Approximate number of citizens served
265	

Agency Mission (brief statement)
The mission of the Missouri Secretary of State's Office is to support democracy by ensuring honest, fair, and reliable elections; providing essential information to enlighten citizens and enrich their lives; foster confidence in the integrity of Missouri business; promote appreciation of our common heritage; and carry out these functions in an efficient and effective manner, so as to reflect credit upon the office as a servant of Missouri citizens.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri Office of the Secretary of State		
Department CIO Name		
Don Lloyd		

Street Address	City	Zip
600 West Main Street	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 751-8471	*(573) 522-9947*	Don.Lloyd@sos.mo.gov

CIO Membership in Professional Associations – Leadership Role Involvement *(i.e., NASCIO – serve on architecture standards committee)*

IT Division Name	Website URL
Information Technology	

Number IT FTE (located in central office)	Number IT FTE (located in field)
14	*0*

Total $$ value of FY05 IT requests submitted to OA Budget and Planning	Total $$ value of FY05 IT requests funded
$3,687,999	*$3,720,018*

Security Officer Name	Phone No.	E-mail
Justin Baker	*526-2125*	*Justin.baker@sos.mo.gov*
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
Missouri Office of the Secretary of State	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*IBM, HP*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee Virus Scan*
Desktop	*McAfee Virus Scan*
Internet	*McAfee Virus Scan*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
MS SQL Server, Oracle	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
Microsoft .NET	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
Verisign	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Source Safe
Telecommunications (T1, Frame Relay, etc.)
T1
GIS (ArcView, MapInfo)

Office of Information Technology
2004 State of the State IT Report

Missouri Senate

Overview

The Computer Information Systems department is responsible for maintaining the computer network, mainframe system, and desktop and laptop computers in the Senate. This includes hardware and software support, as well as the maintenance of peripherals, such as printers, scanners and fax machines.

Computer Information Systems maintains the servers and manages the content of the Senate Internet and Intranet sites. The Internet site includes member information, hearing schedules, journals, committee makeup and other Senate information that can be accessed by any Internet user. The site is also used to stream live floor debate in multiple formats, as well as provide the status of bills for users.

Our goal is to provide the highest level of service to our members and the citizens of Missouri with the most comprehensive legislative information available, while doing whatever we can to keep the costs of providing such services as low as possible.

Accomplishments

Bill Tracking System
The Senate's Bill Tracking system has been completely rewritten in 2004. Formerly stored in a database on the Unisys mainframe, the database is now SQL, making it much more accessible to other applications. Our website will provide information on bills in real-time for the 2005 session. Previously, the web was updated in batch form upon adjournment two to three times daily. Our new system will allow us to provide much more timely information to our users.

Bill Reporting System
Our Bill Reporting System, available on our internet site, has been enhanced to allow users to have multiple profiles under a single user name. This eliminates the need to establish a new user ID for each list of bills a user wants to track.

Time Management System

We have deployed an in-house developed time system that allows accurate tracking of leave records and provides accessibility of those leave records to each employee on demand.

Registered Voter System

Our registered voter system has been rewritten to use SQL database in place of our previous mainframe system. The user interface has been rewritten using VB.Net in place of the Unisys COMS interface previously used.

Internal Applications

Many of our internal applications, including bill filing and committee votes, have been rewritten. We also have an in-house instant messaging system that was developed by our staff.

Streaming Audio

In addition to our current RealAudio format, we have added the capability to stream our floor debates in Windows Media format.

Infrastructure Improvements

We have installed new servers, desktops, laptops and UPS protection.

Planned Projects

Continued System Conversion

CIS will continue conversion of all of our Unisys legacy systems to a server-based environment. Maintenance of the mainframe is expensive and the user interface is cumbersome for our users. New systems will be developed with Windows- and web-based interfaces.

Wireless Networking

Plans are being evaluated for deploying wireless accessibility to our members.

Accumulated Demand

Demand is high for customized software and reports. All of our development is done in-house, working closely with our end-users. In addition, there is maintenance of network hardware and software, desktop hardware and software, maintenance of our unconverted legacy systems and improvements to recently converted systems.

General Department Profile (2004)

Department Name		
Missouri Senate		

Street Address	City	Zip
State Capitol Building	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-4663 *(Senate Administrator)*		www.senate.mo.gov

Department Director		
President Pro Tem		

Number of FTE (entire department)	Approximate number of citizens served
214	*All of Missouri*

Agency Mission (brief statement)

Department CIO and IT Division Profile (2004)

Department Name
Senate Computer Information Systems

Department CIO Name
Amy Niedergerke

Street Address	City	Zip
State Capitol Building, Room B-12	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-2406	*573-751-9439*	*aniederg@senate.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement *(i.e., NASCIO – serve on architecture standards committee)*
ITAB

IT Division Name	Website URL

Number IT FTE (located in central office)	Number IT FTE (located in field)
12	

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded

Security Officer Name	Phone No.	E-mail
Mike Jeffries	*573-751-2406*	*mjeffrie@senate.mo.gov*
Privacy Officer Name	Phone No.	E-mail
Mike Jeffries	*573-751-2406*	*mjeffrie@senate.mo.gov*
ITAB Alternate Name	Phone No.	E-mail
Mike Jeffries	*573-751-2406*	*mjeffrie@senate.mo.gov*
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2004)

Department Name	
Missouri Senate	

Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)

Mainframe	*Unisys NX5000*
PC Servers	*Gateway, Dell PowerEdge with Windows 2000/2003*
Mid-range	
Networked	*Compaq with Netware 6*

Desktop (Windows XP, 3270, Linux, etc.)

PC	*Windows 98/2000/XP*
Dumb terminal	*None*

Network Protocols (TCP/IP, SNA, IPX, etc.)

TCP/IP

Internet Connections (DSL, Cable, Dialup, etc.)

Via SDC

Internet Service Provider (MORENET, AOL, etc.)

MOREnet

Security Provisions (packages, anti-virus, filters)

Network	*Symantec Corporate*
Desktop	*Symantec Corporate*
Internet	*Cisco Pix*

Help Desk Packages (Magic, GWI)

Database Management Systems (DB2, Oracle, SQL, etc.)

SQL, DMSII (Unisys)

Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)

.Net, COBOL

E-Mail Packages (Exchange, Lotus Notes, etc.)

Ipswitch IMail

Encryption Packages (SSL, PGP, etc.)

SSL

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)

Telecommunications (T1, Frame Relay, etc.)
GIS (ArcView, MapInfo)
ArcView

Office of Information Technology
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<h1 style="background:black;color:white;">Department of Social Services</h1>

Introduction

The mission of the Department of Social Services (DSS) is to maintain or improve the quality of life for the people in the State of Missouri by providing the best possible services to the public, with respect, responsiveness and accountability, which will enable individuals and families to better fulfill their potential. The Information Services and Technology Division (ISTD) supports this mission by providing data systems and technology services essential for administration of social service programs.

Accomplishments

Wage Information Interface with the Department of Labor and Industrial Relations

Programming was completed to compare wages reported to Department of Labor Industrial Relations (DOLIR) by employers with the income for earners on Medicaid cases on a daily and quarterly basis. Medicaid cases have an eligibility income limit. The interface generates a notice to the caseworker when the wage information reported by the employer exceeds the amount of income budgeted on the case. This alerts the caseworker to potential ineligibility with instructions to reinvestigate the case and take appropriate action. The result is lower Medicaid expenditures for individuals that are not eligible for benefits.

Interface with Infocrossing Healthcare Services and PSI -- Automated Mailing Address Updates

Public assistance recipients tend to have more contact with the Medicaid Recipient Services Unit and the managed care enrollment broker, Policy Studies Incorporated (PSI), than they do with their caseworker. As a result, these contracting organizations often become aware of address changes for recipients long before it is reported to Family Support Division (FSD). Infocrossing Healthcare Services and PSI would provide a list of address change reports to FSD, but several days passed before caseworkers received

the information. When mailing addresses are not updated timely in FSD's system, the result is an inordinate amount of returned mail which translates into higher postage expense.

To reduce returned mail rates, an interface has been developed where daily files containing address changes reported to Infocrossing and PSI are transmitted to DSS. Income Maintenance processes the new addresses by programmatically updating them in the system the same night and then sending alerts to FSD county staff advising them of the address changes in their caseload via e-mail. Addresses are updated without effort by FSD staff in one day. The manual process required a week.

Weekly Certification of Food Stamps Claims
Certification of Food Stamps claims for benefit repayment erroneously received by clients has been initiated weekly. This was an annual process with the Treasury Offset Program (TOP). Establishing a Date of Delinquency (DOD) for food stamp claims was the key to certification of a claim to the Treasury Offset Program. This required extensive review of the existing programs to define, calculate, and display the DOD. A claim must be delinquent for 180 days to be certified to TOP. This change has certified close to a million dollars to be intercepted by TOP since it was implemented on May 25.

Common Area Application
The Common Area Application uniquely identifies clients participating in DSS program areas by assigning a Departmental Client Number (DCN). This allows for tracking of a client between the various systems.

Changes were made to the Common Area to lengthen the lifespan of the DCN. Statistics show that DCNs are assigned at a rate of a thousand client numbers a day. With this rate and without the changes, the numbers would have been at risk of rolling over.

As part of ISTD's strategic plan to modernize legacy systems, the Common Area database is scheduled to be converted from an IDMS database to DB2. This is an enterprise project, broken down into a series of smaller projects. The first project, 90% completed, was to remove hard-coded calls inside interfacing legacy systems and convert them to call subroutines. Over 1,800 program modules were reviewed and/or changed for the first project.

DSS is working in cooperation with the Department of Health and Senior Services (DHSS) to update newborns with Social Security numbers as DHSS receives the information from the Social Security Administration. Coding has taken place for both incoming newborns and backfilling with the backlog of omitted SSNs. String testing between the two agencies is the next step. This enhancement will reduce the number of duplicate DCNs within the Common Area and also decrease the number of Social Security applications that clients must fill out to apply for assistance.

The Common Area maintains audit information to track what employees are updating client information. The Common Area was enhanced to capture the employee's full

userid instead of only three bytes of the userid. This ensures that we uniquely identify the correct employee to the transaction completed in the system. Without the change, the three bytes would begin to repeat, causing confusion as to which employee executed the transaction.

Automated Security Access Processing (ASAP) System

Previously DSS used a paper form and a manual procedure for customers to request new, or changes to existing, user IDs or access. This process averaged 14 days for customers to receive their access, required a large amount of storage space for paper forms, and required a manual notification process. A paperless web-based application was developed and implemented. This process reduced the average time for customers to receive access to 3 days, eliminated the need for storage space by maintaining the requests on-line, replaced the manual notification process with a system generated e-mail notice and reduced processing errors.

Confidentiality and Security Awareness

DSS employees often have access to confidential records and information. The confidentiality statement was removed from the paper on-line access request form and a new Department Confidentiality form was developed and implemented as part of the "new employee" process performed by Human Resource Center. Other security awareness activities include distribution of quarterly security reminders to all DSS Staff, distribution and posting of posters with security tips, establishment of local security officers in the county offices, and formal recognition of October as Cyber Security Month.

Health Insurance Portability and Accountability

The Health Insurance Portability and Accountability Act (HIPAA) provides for the standardization of electronic patient health, administrative, and financial data while requiring the implementation of stringent privacy and security requirements. A subroutine was developed and implemented to improve the tracking of disclosures made through on-line transactions, new web-based reports were added to the Disclosure Tracking System to provide an accounting of disclosures, an assessment and gap analysis was completed, and work has begun to ensure compliance with the security regulation by April 2005.

Self-Registration and Password Reset

Applications that allow DSS clients to receive information through the Internet are becoming more prevalent and the need has been identified for clients to be able to uniquely identify themselves so they can retrieve or submit more sensitive information. DSS purchased Tivoli Identity Manager and Tivoli Access Manager software which will eventually allow clients to obtain a unique user ID and manage their own passwords from the Internet. DSS also started working with the State Data Center to implement these products with a central point of administration which will allow other state agencies to utilize these software products and lay the ground work for a single sign-on for Missouri citizens.

Multi-Agency Data Dictionary

In order to deliver and coordinate services between state agencies, electronic sharing of data is necessary. The appropriate information technology infrastructure, including common data dictionary standards, is critical if information is to be shared for services delivered by multiple agencies. Staff from various state agencies worked together to define common attributes in a multi-agency data dictionary. Along with the multi-agency data dictionary, a data dictionary methodology was documented for future use.

Media/Press Release Application

An application was developed and implemented to rapidly communicate departmental press releases to media/news contacts across the State of Missouri using a combination of e-mail and fax broadcasting software.

On-line File Transfers

Medicaid Remittance Advices, which required the printing of nearly 100 boxes of paper each month, were converted to on-line file transfers. This provided significant savings in labor, paper and printing costs.

Office Automation

ISTD began maintaining and developing "small" server based database applications designed to support administrative functions. This included the development of a web-based Purchase Order Tracking system, a web-based Employee Threat Tracking system, and a Departmental Software Inventory Tracking system; the conversion of several database applications from Lotus Notes, Knowledge Man, and Reflex to technologies currently being used by DSS; and the implementation of Microsoft Access "Runtime" which allows deployment of Microsoft Access databases without the need to purchase full copies of the Microsoft Access software for the workstations.

Database Administration

In addition to providing database support for the application development projects, the conversion from DB2 plans to packages was completed, performance tuning of MACSS on-line screens and batch jobs continued, automation of the DB2 REORG jobs so that tables are only reorganized when needed was started, the upgrade to IDMS 15.0 was completed, and ISTD began participation in the Council on Accreditation process with the Children's Division.

Family Assistance Management Information System

The Family Assistance Management Information System (FAMIS) is a statewide, automated, integrated eligibility system for DSS programs including Child Care, Food Stamps, Temporary Assistance and Medicaid. Resource directory, provider management, child care and food stamp components are operational in the FAMIS system. Pilot implementation of the Temporary Assistance components of FAMIS began in November 2004. Statewide implementation for the Temporary Assistance component will be completed in May 2005. Workers are now able to accept applications through an interactive interview for over 250,000 recipients and determine their eligibility on-line.

Enhancements to the system during 2004 resulted in the following:

- FAMIS automates labor-intensive processes, thereby speeding delivery of services to clients.
- FAMIS standardizes benefit eligibility determination, thereby reducing error rates.
- FAMIS allows staff time to be redirected toward additional welfare reform goals to help clients become self-sufficient.

Electronic Benefits Transfer (EBT)

System modifications were completed to manage the EBT payroll processing for the FAMIS Temporary Assistance (TA) cash benefits. The new payroll processes were established to facilitate the conversion of legacy Income Maintenance TA cases to FAMIS. Additional system modifications are planned to close out the payrolls for legacy Income Maintenance TA benefits after the May 2005 statewide rollout for FAMIS TA. System modifications are in progress for final close out of the legacy Food Stamps payroll processes which were targeted for removal after FAMIS Food Stamp was operational for twelve months.

On-line Reporting

One of the strategic goals for ISTD is to provide DSS staff with prompt access to the information they need. ISTD utilizes a data warehouse and a variety of software packages to accomplish this goal.

The data warehouse provides a central repository of information to facilitate reporting. In 2004, the data warehouse was expanded to incorporate Youth Services and FAMIS TA information. Software was acquired to produce reports that show DSS client information by legislative district.

MOBIUS is a vendor supplied report distribution system that allows paper-based reports to be distributed and viewed on-line through a browser. The on-line reports can be accessed almost immediately after they are created and can be indexed for quick retrieval or archived for future use. During 2004, microfiche files for the Family Support Division and an additional 160 paper-based reports were converted to on-line reports.

WEBFOCUS is an on-line managed reporting environment that enables users to run real time ad hoc reports or more complex "canned" reports developed by technical staff. During 2004 additional WEBFOCUS reports were added to the Family and Children Electronic System, Family Automated Management Information System, Missouri Automated Child Support System, Energy Assistance and Youth Services projects; upgrades to WEBFOCUS servers and software were completed; and Environmental Systems Research Institute's Arc Internet Map Server (ArcIMS) software was procured. The ArcIMS software will allow the merging of the WEBFOCUS functionality with the inclusion of visual map displays of the information.

Child Care On-line Invoice System

When child care vendors report attendance information, they must complete a paper invoice and submit it to Family Service Division (FSD) where it is keyed into the system. A web-based application was developed and implemented to allow child care vendors to enter attendance information on-line through the Internet. This will reduce the number of mailings distributed by FSD and reduce overall processing time, while freeing up staff to work on more urgent issues.

Medical Assistance Eligibility Income Limit Increase

Medical Assistance provides Medicaid coverage for elderly and disabled citizens, many of whom have no other medical insurance. The income limit for this program was increased from 90% to 100% of the Federal Poverty Level beginning in July 2004. The increase allows more citizens to be eligible for Medicaid on a non-spend-down (no premium or deductible) basis.

ISTD developed an automated process and adjusted approximately 152,000 cases. Development required approximately 200 hours for the adjustment process. An estimated 100,000 hours would have been required for FSD county staff to adjust the cases.

House Bill (HB) 1453: Children with Special Health Care Needs

Prior to HB 1453, children eligible for Medicaid under the Children's Health Initiative Program were required to wait 30 days after application for coverage to begin. Additionally, a 6-month penalty period was applied to any family that dropped affordable health insurance without good cause leaving the children in the family ineligible for Medicaid coverage until the penalty period expired. HB 1453 waives the 30-day waiting period and the 6-month penalty for any child with a special health care need as confirmed by the child's physician.

ISTD completed programming to allow eligibility for these children to be generated. Special fields were created to facilitate tracking and to provide statistics regarding the number of cases where affordable, employer-subsidized insurance was dropped and the reasons it was dropped.

Medical Assistance for Families Eligibility Income Limits Reduction

Budget cuts in state government necessitated a reduction in the Medical Assistance for Families (MAF) eligibility income limit (EIL) from 77% of Federal Poverty Level to 75% to reduce the number of Medicaid eligible adults. An automated adjustment was executed to change the EIL on approximately 157,000 cases. A number of cases were converted to Transitional Medical Assistance where there was an employed adult losing MAF eligibility. The remaining cases no longer eligible for MAF were converted to Medicaid for Children to preclude any loss of coverage for children. An adjustment of this complexity would have required at least 200,000 hours of FSD staff time if the automated process had not been developed and utilized.

Energy Assistance

ISTD completed FY05 season maintenance and enhancements to the Low Income Home Energy Assistance Program (LIHEAP). LIHEAP is utilized by Missouri's Energy Suppliers and the Community Action Agencies (CAA) from the Internet and managed by the legacy Energy Assistance system and Web Interface application. The FTP process for the Energy Supplier files changed from a manual process to an automated process. Additional system enhancements were implemented to improve the CAA's business processes for completing client registrations and applications, case maintenance and reporting and to improve the payment process for the energy suppliers.

Suspected Program Violation

ISTD implemented changes to the Claims and Restitution System due to approval of our Claims Referral and Management Plan. This included designating, at establishment, that a claim is a Suspected Program Violation (SPV). This required the addition of the SPV field to the entry and tracking systems, as well as update capabilities in certain circumstances on the tracking screens. In addition to the field changes, the rules for generation of reports to WIU (Welfare Investigation Unit) were changed. Demand letters were revised as a result of the addition of the SPV indicator, as well as changes to food stamp policy regarding compromise of claims balances.

Mailstream

The Income Maintenance System prints and mails an average of 18,500 letters and notices to clients for various programs every month. In addition, an estimated 120,000 notices are mailed for various automated adjustments throughout the year. By utilizing Code 1 Plus and Mailstream, it was possible to reduce annual postage costs by approximately $24,000. Code 1 Plus standardizes mailing addresses and Mailstream prints a barcode in the address area that is used by the USPS for automated delivery. A discount averaging 7 cents per letter is applied to mail in excess of 500 pieces with bar coding.

In an effort to reduce Division of Medical Services' mailing costs, annual Provider 1099 forms were changed to use USPS standard mailing addresses and bar coding. There are approximately 22,000 1099 forms mailed annually.

Using Code-1 and Mailstream Plus, CSIPS payroll jobs were recoded to barcode approximately 10,000 monthly checks and remittance advices thus receiving reduced postal rates.

Missouri Automated Child Support System - Major Enhancements

The Missouri Automated Child Support System (MACSS) had 89 change requests and projects for enhancements in the MACSS system functionality. Additionally, 149 other requests were completed for ad hoc reporting, corrections or changes to current existing functionality. Eleven major modifications resulting in database changes were also completed.

Several interfaces with other agencies have been implemented or enhanced this year:
- Insurance reporting for Third Party Liability
- Improved information from the Department of Corrections regarding the Probation & Parole information as well as information on Incarcerations
- Professional Registration Interface
- FAMIS TANF Interface

Performance turning of MACSS on-line screens and batch jobs continued. This tuning has increased the available batch window time as well as saved significant processing costs. Large scale review and cleanups of various program and JCL libraries has also begun resulting in more conformity, fewer abends, better change control procedures, and freeing of additional electronic storage requirements.

Buy-in
The Buy-in System allows states to pay for Medicare Part A and Part B for certain individuals when it is feasibly advantageous for the state. There is an interface with Centers for Medicare and Medicaid Services (CMS) where transactions are exchanged between the state and this federal system. A new system allows data exchange to be a daily, rather than a monthly, process to allow states to handle Buy-in more quickly. Major system changes have been made for this enhancement. Buy-in processing in the new format and daily processing was implemented in December 2004. Currently, the state does Buy-in for approximately 100,000 individuals.

Family Support Division, Income Maintenance Time Study Implemented
DSS replaced the paper-based and labor-intensive time study entry and reporting process with a new on-line time study application. This new web application, affecting approximately 2,300 caseworkers, eliminates the need to mail, complete, and return paper communication to and from county caseworkers, thus saving time, paper, printer, and distribution resources. The application collects the input data into a central database, eliminating data entry and a lengthy process for compiling reports. Data collected is used to determine federal fund participation for various programs administered by DSS. This new system has greatly reduced staff time needed to record and calculate employee time.

Modifications were made to the various time study reports to reflect the geographic restructure of the Family Support Division. Reports are now available by region as well as county. Various usability enhancements were also incorporated into the process.

DSS Internet Address Inquiry
A web solution was implemented that allows citizens accessing the DSS Internet website a one-stop access point for information on services provided by the department. This access method provides a convenient way for citizens to locate contact and office information for DSS services provided in their county.

Intranet Content Publishing

The number of manuals and reference materials available to DSS employees from the DSS Intranet has increased greatly. The Child Welfare Manual and Youth Services Manual are new manuals available to staff electronically in 2004. On-line manuals eliminate the need to print and distribute paper manuals saving much needed resources. This also assists in staff productivity by having the most up-to-date manuals available in one location.

Departmental IVR System Activity

The DSS Interactive Voice Response System serviced 7,674,307 customer calls, averaging 639,526 calls monthly. The IVR provides the public with information on child support payments, inquiry for child care, food stamp, cash assistance, Futures, Medicaid/MC+, employee disqualification list (Health and Senior Services) and certified nurses' assistant (Health and Senior Services).

Personnel

The Personnel system provides around the clock access to worker information for other legacy applications' hotlines/help desks. ISTD supports the Human Resource Center (HRC) in providing automated reports from the Personnel system and/or from the Office of Administration's SAMII HR system.

Eighteen enhancements were made to the Personnel system for divisional payroll officers and for HRC staff. The additional reports were created to help monitor the agencies' workforce, equal opportunity regulations, civil rights violations, and excellence recognition. Two new on-line screens were added to provide real time access to pay rate information and employee tenure data. Inactive employee data is now purged from the system on an annual basis, decreasing storage space and decreasing irrelevant data on reports/screens.

Thirty-six personnel paper reports have been moved to MOBIUS to lesson the printing of paper, improve the timeliness of the reports, increase the productivity of the payroll staff, and improve disaster recovery measures.

Cost Allocation

The Cost Allocation system aids ISTD with meeting federal requirements for equitable costing of its worked performed, minimizing the over or under recovery of ISTD's total budgeted costs.

As planned, ISTD is incorporating State Data Center (SDC) data into the Cost Allocation System, dropping two other separate feeds. Changes have been made and it is currently in parallel run, to demonstrate to the federal government that the enhancements are accurate and acceptable.

Family and Children Electronic System (FACES)

The FACES system is being developed under a federal program to create a Statewide Automated Child Welfare Information System (SACWIS) for the purpose of creating a

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comprehensive automated case management tool that supports social workers' foster care and adoptions assistance case management practice. Additionally, states were encouraged to add complementary functionality to their SACWIS, such as functionality that supports child protective and family preservation services, thereby providing a unified automated tool to support most, if not all, of child welfare services.

Missouri has completed the implementation of the first deliverable under this program in the area of eligibility determination. Eligibility specialists across the state now have a comprehensive, automated tool that captures and calculates determination for eligibility of Title IV-E, Title XIX and Adoption Subsidy cases in addition to the re-determination process that occurs on a cyclical basis.

Child Abuse/Neglect Automated Alert Printer Change
Family Support Division county offices receive initial notices of child abuse incidents via an alert directed to their office printer. When printer problems occur, staff needed a process to immediate redirect the alerts to a functioning printer. A real-time system was implemented to allow Help Desk staff to re-assign printers when diagnostics determine the initial printer is not functioning thus, eliminating the one- to two-hour delay and providing 1,500 field workers with current information.

SEAS Backdating AC/CT Requests Forty-five Days
The Service Eligibility Authorization System (SEAS) was enhanced to handle backdating of authorization of client services and requests for payments for services to forty-five days. Enhancement affected 1530 Alternative Care (AC) providers and 962 Children's Treatment (CT) providers.

Missouri Alliance/CMO Payments
ISTD has been systematically submitting Medicaid claims for services provided by the case management organization, Missouri Alliance, in order to draw down the federal match on claims for 2003/2004. Monthly claims amount to approximately $750,000. Claims submissions will be current by January 2005.

DHSS Automated Interface to Multiple Systems
Department of Health and Senior Services' Family Care Safety Registry was conducting manual inquiries into three different systems when researching foster care licensing data. An automated query was developed to retrieve specific data, thus, eliminating the 15 minutes required for manual searches and achieved immediate responses. Family Care Safety Registry's processing of over 100,000 requests was streamlined.

Automated Children's Treatment Contracts
Contract Management Unit has manually tracked and extended the 962 Children's Treatment Contracts. ISTD developed a streamlined process by automating correspondence, the official contract amendment, bar-coded the mailing and the final provider contract was renewed on-line. This significantly increased the timeliness for vendors to receive renewed contracts and it assured the continuity of services to

Children's Division clients served by Children's Treatment Service contractors, during the transition of one fiscal year (FY04) to the next (FY05).

CA/N Weekend/Holiday Reporting

Child Abuse and Neglect system was not designed to track daily processing for data feeds to the data warehouse system. Holiday and weekend data loads were developed to keep warehouse data current, to allow accurate reporting for business staff to address critical situations, and supply needed data to address legislative, public or newspaper queries.

Background Screening for School Bus Drivers

Department of Revenue has legislative requirements necessitating the background screening of applicants for School Bus Driver's license against the Child Abuse and Neglect System. Enhancements include an automated input and output file interface with Department of Social Services and Department of Revenue on a daily basis. Implementation is scheduled for January 2005.

Interfaces with Department of Elementary and Secondary Education

In compliance with Department of Elementary and Secondary Education (DESE), education information gathering has expanded to include handicap end date information. Several reports have been created or undergone changes to reflect compliancy including reports on GED and student transcripts. During the coming year, additions will be made to the productive involvement application area to provide detailed education and job placement information as required by DESE.

Email System, Systems Management System, and Active Directory Upgrades

Department-wide implementation of Exchange and Active Directory, providing a single e-mail and directory system, was accomplished in 2003. Related to that, IBM Personal Services software was no longer needed and was removed at a savings or approximately $5000 per month in mainframe software costs. Implementation of Microsoft's Systems Management System (SMS) software that provides automated inventory, software distribution, and remote control of approximately 10,000 network workstations at over 200 sites from a central site, was completed in 1999. In 2004, ISTD began the process of upgrading these software products to the latest versions. The upgrade of these products enables DSS to take advantage of their latest and most advanced features.

The Exchange 2000 e-mail system, which provides services to approximately 9,000 users, is being upgraded to Exchange 2003. Approximately 60% of the users are now running on the upgraded version. The upgrade of directory services from Windows Server 2000 to Windows Server 2003 was completed in August 2004.

The computer systems management environment version is being upgraded from SMS 2.0 to SMS 2003. The design and planning stage is completed and initial deployment has begun. Estimated completion of this project is January 2005.

Paper Forms Reduction

In 2003, a committee was formed and work continued throughout 2004 to evaluate paper form usage and storage within DSS. Of the approximately 800 forms stored at the Division of General Services' warehouse at that time, the committee identified 101 forms that were no longer in use. Stocking of those forms was discontinued and forms on hand were disposed of. As a second phase the committee looked at the forms that were available in both paper and electronic formats. Interviews were conducted with the program divisions to determine which forms could be eliminated by mandating use of the electronic form only, thus eliminating additional paper forms. Using this approach another 93 forms were eliminated for a total reduction of 194 paper forms.

As the Children's Division and the other program divisions continue to convert their forms to electronic versions, the number of paper forms will continue to be reduced. There will probably always be a need for some paper forms because of cost factors, business practices, etc., but DSS is committed to determining the most cost effective and efficient way of producing required documentation.

Statewide Hardware Installation Team

In cooperation with a department initiative, the ISTD installation group was reduced from 10 to 4 FTE. ISTD enlisted the support and cooperation of the approximately 30 existing out-state computer information technologists from other DSS divisions to create a geographically dispersed statewide installation team. Use of these staff for equipment installations and problem determination and resolution reduced travel time and expenses and allowed more timely installation and repair of computer equipment.

The Statewide Computer Installation Team installed a total of 4,183 new PCs and 775 new printers. This equipment replaces outdated equipment and technology to allow for DSS program staff to more efficiently perform their duties. This has also increased the workers morale by replacing equipment that was 5 years old or older, slow and periodically failing, with more dependable and faster computers.

The team reinstalled approximately 820 PCs and 135 printers due to office moves and remodels at 10 DSS locations. This also involved reinstallation of telecommunications equipment at these locations.

Infrastructure for Web Applications

A project was undertaken to create the infrastructure for the mainframe computer system and network to support web-based applications. Web-based applications are more user friendly than traditional green screen applications thus saving time and training costs for DSS employees.

Infrastructure work completed thus far includes:
- Configured all 6 application environments to allow full life cycle development and testing.
- Changed the EDP190 module migration process to allow UNIX objects and public application load modules to be moved under a controlled procedure.

- Configured all TCP/IP services in CICS to allow public web applications without the use of user IDs and passwords.
- Standardized web development environments and naming conventions to avoid accidental object overlays.
- Created standards for NT and UNIX directories.
- Created naming standards for web objects.
- Created standardized rules for all URLs.

File Transfer Process Conversions

A project for automating processes to transmit data files to and from state government and external entities was undertaken. Automating this process allows for timelier, more reliable, and secure delivery of needed data files. As a result, DSS employees have quicker access to data needed to support clients.

Depot Maintenance

The following number of equipment replacements occurred: 181 PCs, 24 keyboards, 63 monitors, and 73 printers. Cost savings were realized due to the state not having to pay "time and material" for the repair of "out of warranty" defective equipment. The depot group repaired equipment when possible and created a pool of equipment that could be used to replace defective equipment in the field.

Elimination of Older Data Communications Technology

The process of converting old SNA protocol to the industry standard and widely used TCP/IP protocol, as well as the conversion from token-ring to Ethernet technology continued in 2004. Elimination of the old technologies from the DSS network saves money on equipment and maintenance. It also simplifies disaster recovery.

Only 2 SNA lines remain. Steps are being taken to remove them by early 2005. All remaining token-ring devices will be removed when the remodel at the Page Office Building in St. Louis is completed in December 2004.

Data Circuit Upgrade at Youth Services' Facilities

Bandwidth was doubled at nearly half of the Youth Services' facilities as funding allowed. This increased bandwidth improved response time for the workers at these facilities as they accessed applications across the wide area network. The improved response time increased employee productivity and allowed the workers to better serve their clients. Data circuit upgrades were implemented at 35 sites.

Upgraded Security on Network Equipment

ISTD upgraded the operating systems on its approximately 220 network routers to provide greater network security and better protect against security threats. This reduces the risk of network outages providing greater availability of accessing applications over the network.

Network Disaster Recovery Infrastructure

The DSS network infrastructure was redesigned to satisfy disaster recovery needs and balance the network load. This consisted of creating an alternate/backup network core site. A Cisco 7507 core router was moved from primary site to a backup site and a Cisco 3750 core switch was implemented at both locations. A DS3 backbone data circuit was ordered and installed at the alternate backup site. This redesign allowed better through-put and helped slow down network outages due to denial-of-service virus attacks. It also provides network core site redundancy allowing circuits to be swung to the alternate site if the primary site becomes inoperative.

Firmware Update on Printers

All printers were upgraded so that they could be accessed via the network by printer name. The result of these efforts is DSS employees have easier and quicker access to printers. Prior to this change, the only way to access the network printers was by IP address.

Planned Projects

Automate On-line Transaction Request Form

ISTD uses a paper form and a manual procedure for application teams to request assignment and setup of new on-line transaction codes. In 2005 this procedure will be replaced by developing and implementing a new paperless web-based application that will reduce processing time and improve ease of use.

Health Insurance Portability and Accountability

The Health Insurance Portability and Accountability Act (HIPAA) provides for the standardization of electronic patient health, administrative and financial data while requiring the implementation of stringent privacy and security requirements. For 2005 activities will be completed to ensure that DSS is in compliance with the standards set forth in the HIPAA Security Regulation.

Investigation/Audit Process

ISTD currently processes requests for investigations and audits regarding electronic data. In 2005 ISTD will develop and implement standardized policies and procedures regarding investigations and/or audits of electronic data.

Security User Database Conversion

DB2 has been identified as the database management system of choice for future development activities at the DSS. In 2005 the Security User Database application will be converted from IDMS to DB2.

Self-Registration and Password Reset

In 2005 ISTD plans to implement password reset functionality which will allow DSS employees to reset RACF and Active Directory passwords via a web interface.

On-line Reporting

In 2005 the use of the Data Warehouse will be expanded to include MACSS and the FAMIS Medicaid Eligibility. MOBIUS will continue to be used to convert paper-based reports converted to on-line reports. The ability to produce reports showing food stamp cases by legislative district is currently under development. ISTD will analyze the Louisiana Food Stamp Fraud application for possible conversion and use for DSS employees.

Office Automation

During 2005 ISTD plans to expand development and maintenance activities for smaller server-based database applications and will complete the conversion of the Lotus Notes applications.

Database Administration

In 2005 support of the application development database changes will continue, the revisions to DB2 REORG jobs will be completed, an application to track and identify performance issues will be developed, and product upgrades to DB2, CA/DB2 Tools and the Central Encyclopedia will be completed.

Electronic Benefits Transfer (EBT)/Direct Deposit

The Family Support Division is investigating the possibility of adding Transportation Reimbursement Expense (TRE) payments to the Temporary Assistance client's EBT card. System modifications will be necessary to accommodate these payments.

Family Assistance Management Information System (FAMIS)

Development for the next phase of FAMIS, Medicaid, will start by February 2005. Medicaid will be broken down into phases with the first phase consisting of Medical Assistance for Families. This will provide a more integrated system for the workers so they can complete applications for Child Care, Food Stamp, Temporary Assistance, and Medical Assistance for Families at the same time by entering the data into one system, thereby providing quicker eligibility determinations for the clients.

Automate the Adverse Action Notice for TA Claims

DSS uses a paper form and a manual procedure for sending adverse action notice to the client when a Temporary Assistance (TA) Claim is entered in the Claims and Restitution System (CARS). ISTD will automate this process and track this procedure in the CARS system. This notice serves 3 functions: notifies the client of the over issuance, notifies the client of the proposed recoupment actions to reduce the TA amount and gives the client the right to a fair hearing.

Medical Assistance Spenddown Enhancements

Enhancements to the Medical Assistance Spenddown system will be implemented during 2005 in an effort to reduce the amount of manual intervention required for processing prior quarter Medicaid coverage. The current system does not have a means of keeping a history of monthly Spenddown amounts for recipients. Without the ability to store history, there is not an automated means of processing benefits retroactively. History

becomes especially useful for those cases where the recipient chooses to pay a premium to become eligible rather than submitting medical bills to meet Spenddown.

The enhancements planned for the Spenddown system may also be used to improve the Medicaid for Children and the Medical Assistance for Workers with Disabilities premium collection systems. The premiums are based on income and the current system does not store a monthly income history. The history can be obtained from audit files but it would be less cumbersome to view history that is stored on a database and can be accessed with an on-line transaction.

Nursing Home Eligibility Certification Processing

For a client to become eligible for nursing home benefits they must first be certified by the Department of Health and Senior Services (DHSS) Central Office Medical Review Unit to verify that vendor nursing care is required. Currently, the process of notifying Family Support Division caseworkers that a client has been certified takes one to two weeks. An interface will be developed that will allow caseworkers to check the status of the request for certification on-line. Additionally, a process will be developed where DHSS provides DSS with a daily file of individuals that have been certified. If an individual is already receiving Medical Assistance benefits, the caseworker will be notified by the Income Maintenance system that their client has been certified to receive vendor nursing home benefits. A further enhancement will include tracking of vendor nursing home benefit requests when an active Medicaid case already exists to ensure benefits are processed timely for the client.

Program Integrity

Program Integrity is intended to improve the accuracy of eligibility determinations and provide data not currently available in the Income Maintenance system that would allow more processes to be automatic and not require intervention by Family Support Division (FSD) staff.

Part of the project involves interfaces with the Lottery Commission and the Department of Revenue. The interface with the Department of Revenue will be used by FSD county staff to see if a client owns vehicles, trailers, boats and other property that would cause their resource level to exceed the resource maximum and cause them to be ineligible for benefits.

Income data that is currently stored for the case will be stored for each individual by income type to facilitate automatic adjustments and insure that the total income listed on the case is correct. This allows accurate comparisons to be made when comparing wages shown in the Income Maintenance system with wages reported to DOLIR, OASDI amounts reflect the amounts in the Social Security Administration's system, etc.

The third part of the project includes programming to perform system generated reinvestigations on Medicaid cases when a Food Stamp approval or re-certification is entered in the Family Assistance Management Information System (FAMIS). The eligibility factors for a couple of the Medicaid programs are similar to those for Food

Stamp eligibility so all of the data collected and analyzed to process the Food Stamp case is more than adequate to conduct a reinvestigation on the Medicaid case. The system-generated reinvestigation should save caseworkers an average of about an hour per case compared to manual processing.

Automatic Closing of 19 Year Olds

Today a caseworker receives a system-generated report when a Medicaid recipient becomes age 19 on a Medical Assistance for Families, Medicaid for Children or CHIP case. The report advises the worker to recalculate eligibility for the case without the 19 year old, send an adverse action notice and remove the individual from the case after the adverse action notice expires.

Programming will be implemented in 2005 to monitor ages of children on a case, recalculate the eligibility when a child becomes age 19, generate an adverse action notice and remove the child from the case if the caseworker does not enter an administrative hearing code in the system. A notice will be generated to the caseworker advising them to investigate eligibility for other Medicaid programs for the 19 year old or for the entire case in those instances where the whole case becomes ineligible. Automation of this process should save caseworkers one to two hours per case with the added benefit of updating the Medicaid case with the most recent information available.

Voluntary Placements

To receive coverage for some mental health services, children have to be in the custody of the Division of Youth Services, the juvenile court system or the Department of Mental Health. Senate Bill 1003 provides a means of covering these services while allowing the child's parents to maintain custody.

Programming will be completed in January of 2005 to maintain Medicaid eligibility for these children in the Income Maintenance system. ISTD will create a new Medicaid Eligibility code to accommodate medical claims processing.

Medical Assistance Spenddown Enhancements

Enhancements to the Medical Assistance Spenddown System will be implemented to reduce the amount of manual intervention required for processing prior quarter Medicaid coverage. The current system does not have a method of keeping history of monthly spenddown amounts. Spenddown history becomes especially useful for cases where the recipient chooses to pay a premium rather than submitting medical bills to meet spenddown.

Update Departmental Interactive Voice Response System

The Interactive Voice Response System hardware and software will be replaced by a state-of-the art digital MPS500 IVR system. Usability enhancements are planned to provide customers a streamlined and more accessible self-service experience.

Automate the ISTD-145 Form

Automating the process of requesting change to documentation that is published within ISTD is planned. An Intranet active server page application will replace the paper process currently in place. An automated solution will serve to expedite the timely process of updating information.

Intranet Content Publishing

DSS will continue to maintain, publish, and promote data on the Department's Intranet and Internet websites providing timely, convenient, and accessible information to DSS internal and external customers. On-line content will eliminate the need to print and distribute paper manuals and reduce phone calls saving much needed time and resources. It will also serve to enhance productivity by having the most up-to-date information available to customers in one location.

Document Management Project

DSS handles large amounts of paper documents, such as Medical determinations, prosecuting attorney referrals and payment processing. These documents get copied at least twice, physically handled for reviewing, approving, filing, and looking for it. The workflow cycle includes both inside and outside agencies that need to view and collaborate on these documents, generally distributing the documents via mail. This mass amount of paper funneled throughout the DSS locations is creating storage, physical handling, and misplacement problems. A project is scheduled for the purchase and implementation of document management software in designated pilot offices.

Family and Children Electronic System (FACES)

The FACES system implementations scheduled include Protocols (February 2005) and Investigation and Assessment Phase 1 (January 2006). Analysis and Design of Investigation and Assessment Phase 2 and Case Management will also occur in the calendar year of 2005.

Protocols will provide the Child Abuse and Neglect Hotline Unit (CAN/HU) with the ability to capture and manage all calls received regarding neglect or abuse during their 24x7x365 operation. Information collected by the CAN/HU will be categorized as an Incident, Documented Call or Referral and will be assigned accordingly to caseworkers across the state.

Common Area Application

As funding is available, ISTD will continue with the next phase of converting the Common Area database to DB2.

Learning Management System (LMS) Project

DSS currently has an array of applications that maintain training data. Registration and approvals for classes varies by division. Rosters and waiting list tracking varies by division. The disconnection cripples Human Resource Center's monitoring capabilities,

compliance reporting, and delivery of timely training. A project for purchase of LMS software and conversion of existing training courses is planned for 2005.

Automate Student Number Assignment

Design and develop automatic assignment of student number with unique identifiers based on commitment order to assist in the treatment needs for at-risk youth. Enhancement will streamline business process and is scheduled to be implemented in July 2005.

Placement/Exception Tool

Placement/exception is a tool used to place youth in the least restrictive, closest to home placement, which provides the appropriate treatment. Placement/exception is used with risk, seriousness and needs scores to determine youth treatment. A system enhancement to identify factors and results will be developed. A conversion of non-system data will be used for initial data load. Enhancement will be implemented in July 2005.

Intrusion Detection

Intrusion detection software and hardware implementation is planned to better protect the DSS network from computer viruses. Computer viruses have infected departmental computers in the past affecting the productivity of the employees.

Work has already begun as Cisco Security Agent software has been implemented on approximately 50 workstations. The Intrusion Detection System (IDS) 4235 hardware is being tested on an Ethernet segment at the network's core location. Corresponding Threat Response software has been installed on a few servers and is used to filter through logs of messages reporting possible attacks.

Network Bandwidth Upgrade

DSS recognizes the need to upgrade its network bandwidth to provide acceptable response times to its workers as they access data and applications across the DSS wide area network. If funding becomes available, the plan is to update all locations to T1 speeds (or slower speeds if phone company T1 facilities are not available to all sites). Upgrading bandwidth would allow the departmental applications to be accessed more quickly. Today, some applications/software cannot be used because the necessary bandwidth needed to run them is not available. Increased bandwidth would provide quicker response when accessing applications which would mean less time for the clients to spend at the county office.

The increased bandwidth would also allow the workstations on the network to be better managed. Virus and operating system updates require transmitting large amounts of data over the network. Having the ability to upgrade workstations immediately is extremely helpful when a serious virus is detected. Also, more and more web-based applications are being developed which require much greater bandwidth than the old green screen applications. Other initiatives such as Paperless Office, Imaging, WebCast, and e-mail also demand more bandwidth.

TN3270 Encryption

Starting in December 2004, ISTD is implementing encryption on TN3270 emulation software on all new workstations connecting to the DSS network. This results in the data traversing the network between mainframe applications and network workstations being encrypted. Encryption is the translation of readable information, called plaintext, into an unreadable form, called ciphertext. To read the ciphertext, you must have the key that translates or decrypts the ciphertext to the original plaintext.

The type of encryption being implemented uses the Secure Sockets Layer (SSL). SSL is a protocol designed to provide encrypted communications across a network using a combination of symmetric-key and public-key cryptography to create a secure connection. SSL secures transactions, preventing eavesdropping, tampering, and impersonation. In addition to encryption, SSL provides tampering detection, and authentication.

The encryption strength being implemented uses encoding with a 128-bit session key. Encryption strength is defined in part by the length of the keys used to perform the encryption. Key length is measured in bits. A greater number of bits provides a higher level of security. For example, a private key with 1024-bit encryption is stronger than a private key with 512-bit encryption. Encoding with a 128-bit session key is commonly referred to as "strong encryption".

Tivoli Identity Manager/Tivoli Access Manager

Security is a major concern of the state. This has resulted in a collaborative project between DSS, Office of Administration and other departments to use security software to manage user IDs and passwords for individuals who have access to state data resources. The first phase of this project will provide individuals with data access a self service method to reset their passwords even during off-hours. This will reduce access interruptions and result in savings for the state. When the Office of Administration and other departments implement this technology, individuals with access to data will have the ability to use a single user ID across departments.

Branch Office Shared Data and Backup and Recovery Strategy

DSS has acquired hardware and software to enhance data sharing and backup and recovery for approximately 150 locations. The design and planning phase is complete and implementation is scheduled to begin in November 2004. The local branch office data will be replicated back to central site servers in Jefferson City at night to provide a recovery mechanism in the event of user error, data corruption or disaster. This solution also eliminates the need for local tape drives which reduces manual operations at the local offices.

Equipment Installations

Statewide installation of an additional 2,488 PCs is scheduled to begin in December 2004 and continue through February 2005. Depending on availability of funds, additional PCs and printers will be ordered and installed later in the Spring of 2005 replacing equipment that is no longer under warranty.

Accumulated Demand

Annual Automated Adjustments

In December of each year, ISTD performs an automated process that adjusts all Income Maintenance cases that have at least one individual receiving OASDI or SSI benefits. Over 120,000 cases are adjusted in this process. If a caseworker adjusted the cases manually, it would require more than 100,000 hours in the aggregate.

In March of each year the Federal Poverty Level is increased based on the amount of change in the Consumer Price Index. In prior years between 100,000 and 200,000 cases were adjusted. Due to 1931 Waiver, Delinking and Medical Assistance revisions, the eligibility income limit on over 400,000 cases is now based on a percentage of the Federal Poverty Level and requires adjustment in March. It would require over 300,000 aggregate hours for DFS to adjust the cases manually.

Missouri Automated Child Support System (MACSS)

As of December 2004, 44 change requests are in review by executive staff for possible enhancement/revision of MACSS. New federal regulations proposed, if adopted, will further change child support payment distributions and system accounting structure. Changes to MACSS Federal Reporting (OCSE-157) will also be necessary to accommodate the proposed changes required by the Federal Office of Child Support Enforcement. Expanded use of the data received from the Federal Case Registry is being planned as well. The Federal Case Registry has continued to expand the amount and types of information available to all the states.

IM/DWD Interface

An interface between Family Support Division (FSD) Income Maintenance system and the Department of Labor and Industrial Relation's Division of Workforce Development (DWD) was implemented to replace the functions formerly handled by the FSD's JOBS system. Some Temporary Assistance recipients are required to participate in the program to prepare them for employment. If they are job-ready, the program offers placement services. The new interface allows DWD to work with Temporary Assistance applicants as well as recipients.

The new system screens Temporary Assistance applicants and recipients for job-readiness and tracks barriers for those who are not. FSD case managers continue to work with client's who have barriers to employment to help them become job-ready. Individuals that are required to participate are identified in the Income Maintenance system. The information is processed by the Interface system and then transferred to DWD's Toolbox system. This provides DWD staff the information they need to work with the clients directly.

Data is transferred back and forth between the Income Maintenance and Toolbox system on a daily basis. A means of allowing Toolbox real-time access to Income Maintenance data was implemented in the past year and is currently in use. This enhancement benefits

individuals that apply for Temporary Assistance and then seek services from DWD in the same day.

The chief advantage of the new interface is that Temporary Assistance recipients can now take advantage of DWD's resources and expertise to find employment. DWD has extensive contacts in the labor market that are not available through FSD and they have well-established programs to help individuals find jobs.

Family Assistance Management Information System (FAMIS)

ISTD assumed responsibility for maintaining the FAMIS Resource Directory and Child Care system in November 2001 and the Food Stamp component in 2003. ISTD will assume maintenance of Temporary Assistance (TA) after the statewide rollout is complete in May 2005. State staff and contract staff are working together on production support. When the state assumes complete responsibility for FAMIS maintenance, additional staff will be necessary to support the system.

The next phase of FAMIS, Medicaid eligibility, will be developed following TA implementation. Medical Assistance for Families will be the first phase developed. Analysis, coding and unit testing will be started in 2005, with pilot and implementation during 2006.

Health Insurance Portability and Accountability (HIPAA)

The Health Insurance Portability and Accountability Act (HIPAA) provides for the standardization of a unique number called the NPI (National Provider Identifier) assigned to providers from a contracted enumerator through the Department of Health and Human Services. In 2005, providers may apply to have an NPI number assigned to them. In 2007, all providers required to have an NPI must have applied for and received their NPI. After the current system is changed to accept the NPI, other changes will be required to use the NPI where necessary.

Cost Allocation Application

With the budget crisis taking place, ISTD monitors the cost information and detailed billing data, to identify areas of high costs, increased costs, etc. so that ISTD can focus their efforts for lowering costs in those areas. If funding is available, the Cost Allocation IDMS database will be converted to DB2.

Commitment Accounting Application

If funding is available, the Commitment Accounting IDMS database will be converted to DB2.

Personnel Application

A service request for restructuring the training portion of the Personnel database and interfacing the data with SAMII has been placed on backlog due the priority of the reports program and the workload of other legacy application service requests. The project is estimated to take six months. It will reduce the redundancy of data and reduce

the time staff spends keying in the data. If funding is available, the database will be converted from IDMS to DB2.

Common Area Application

The Department of Elementary and Secondary Education (DESE) is evaluating the need for a Statewide Student Identification number. One of the options to accomplishing that is to utilize our Department's Client Number (DCN). This would save DESE hundreds of man hours of keying in common data, save on creating policies and procedures, save time on maintaining numbers. Utilizing our numbering system would open the door for more accurate data sharing between agencies including Department Of Health and Senior Services, Office of State Courts Administrator, and Department of Mental Health who have ties to our Common Area already.

General Department Profile (2004)

Department Name		
Department of Social Services		

Street Address	City	Zip
221 West High Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4815	*573-751-3202*	*www.dss.mo.gov*

Department Director		
Steve Renne (Acting)		

Number of FTE (entire department)	Approximate number of citizens served
8,850	*2,500,000*

Agency Mission (brief statement)
Coordinate programs to provide public assistance to children and their parents, access to health care, child support enforcement assistance, and specialized assistance to troubled youth.

Department CIO and IT Division Profile (2004)

Department Name		
Department of Social Services		

Department CIO Name		
Steven E. Adams		

Street Address	City	Zip
313 West McCarty Street	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-4435	*573-751-0412*	*Steven.E.Adams@dss.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
American Public Human Services Association-Information Systems Management – State Representative

IT Division Name	Website URL
Information Services and Technology Division	*www.dss.mo.gov/ist/index.htm*

Number IT FTE (located in central office)	Number IT FTE (located in field)
162	*0*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$ 0	*$ 0*

Security Officer Name	Phone No.	E-mail
Dan Green	*573-751-4198*	*Danny.J.Green@dss.mo.gov*

Privacy Officer Name	Phone No.	E-mail
Harry Williams	*573-751-3229*	*Harry.D.Williams@dss.mo.gov*

ITAB Alternate Name	Phone No.	E-mail
Augie Buechter	*573-751-4435*	*August.D.Buechter@dss.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail
Steve Adams	*573-751-4435*	*Steven.E.Adams@dss.mo.gov*

Department Technology Profile (2004)

Department Name	
Department of Social Services	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM2084-306 with OS/390, UNIX System Services*
PC Servers	*IBM, Compaq, Dell, Perpetual Systems*
Mid-range	
Networked	*All of the above*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 98, 2000, NT, and XP*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dedicated via SDC and MOREnet, dial-up via MOREnet	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Pix 515R Firewall*
Desktop	*Norton Antivirus*
Internet	*Provided and managed by State Data Center*
Help Desk Packages (Magic, GWI)	
GWI	
Database Management Systems (DB2, Oracle, SQL, etc.)	
IDMS, DB2, SQL SERVER, MS ACCESS	
Development Tools (COBOL, CICS, Advantage: Gen, WebSphere, .NET, etc.)	
COBOL, CICS, Advantage:Gen, Dreamweaver	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Outlook/Exchange	
Encryption Packages (SSL, PGP, etc.)	
Available via network hardware – DES, 3DES, SSH, SSL, MPPE	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Telecommunications (T1, Frame Relay, etc.)
T1, Fractional T1, Frame Relay, ISDN, Analog, DS3
GIS (ArcView, MapInfo)

Office of Information Technology
2004 State of the State IT Report

Office of the State Courts Administrator

Accomplishments

The Statewide Judicial Information Network

The statewide network linking all Missouri courts remains the successful backbone of the Missouri Court Automation Program. Traffic on the network has continued to increase as additional courts begin using the statewide case management system and additional users from the juvenile courts are added. The increase in network traffic is managed by replacing phone lines with fiber and T1 connections which improve service by providing increased capacity, speed and significantly less down time. High speed connections also allow the Office of the State Courts Administrator (OSCA) to react to and quickly manage security threats such as this year's Mydoom.G virus. The ability to distribute updated virus protection software to over 300 servers in 3500 workstations as it was available from vendors meant that virus threats this year had little to no effect on courts, and also saved the Judiciary from significant repair costs incurred at other locations around the state and world.

OSCA also reduced the frustration of increasing spam mail, by installing the anti-spam Webshield appliance this year.

Infrastructure

While the initial infrastructure for Missouri courts was completed in 2001, maintenance of the established framework is what allows all other technology projects to occur. Having all the courts in a standardized infrastructure environment reduces development and implementation costs because each location operates in a similar manner. Adherence to infrastructure standards facilitated OSCA's ability to replace and upgrade over 2000 workstations within the courts, setting the stage for two very successful software upgrades. Software upgrades and security patches were accomplished remotely this year using Microsoft's Systems Management Server (SMS) and Software Update Services (SUS). Remote deployment over the network saved staff and travel costs for the Judiciary, while maintaining superior service to the courts.

standard infrastructure has also enabled the use of **web based training (WBT)** as an alternative to classroom training. WBT has become a key component in the delivery of training to judicial employees, enabling court staff and supervisors to train new staff on demand and without the cost of travel. With the significant cuts in OSCA's Judicial training budget, but no relaxation of the continuing legal education requirements for judges and clerks, WBT has been one of the only ways OSCA has been able to offer required education without adding staff and travel budgets to the education division.

Court Management System

In partnership, Missouri court staff and OSCA staff **continued rollout of the statewide case management system** within the confines of a reduced budget. This calendar year, four adult court locations implemented the software, including the largest custom conversion of data into the system in Jackson County's criminal division. While well over half of the state is now able to use the software and reap the benefits of the system, there are many courts still in need of the software. Depending on the funding available, OSCA is hopeful that they will be able to continue rollout of this system.

Juvenile courts using the statewide case management system continued to increase this year as a Phase II upgrade offered the ability for detention centers to utilize the system as well. **Thanks to continued federal grant funding, nine juvenile offices were added to the case management system**. Due to the number of agencies that provide services to juvenile offenders and the transient nature of most offenders, automation is key to the ability to track the children and the services being offered to them. Automation of this information has allowed Missouri to start a justice information sharing project called the Missouri Juvenile Justice Information Sharing (MOJJIS) which allows all agencies providing service to juveniles the ability to see what services are being provided by courts and similar agencies. This expansion of service to children should empower service providers to continue treatment of a child that moves to their area, and track services outside one agency that have been provided by a different one to reduce cost and duplication of services. As an additional part of this juvenile information sharing, OSCA technical staff converted over 100 Missouri Child Support Information System (MOCIS) databases to current technology to allow continued inquiries of child support data by circuit clerks.

Software Development & Installation

Using the statewide case management system as a backbone, the OSCA Division of Information Technology designed, tested and implemented an automated system to **provide the Missouri State Highway Patrol (MSHP) with required criminal history information**. The courts are required by Statute 43.500 to provide MSHP with an extract of all felony and selected misdemeanor charge dispositions, sentencing and changes in criminal sentences. By developing a data extract from JIS, courts are now able to provide timely reporting, increasing the effectiveness of the justice system and demonstrating a collaborative effort with other state agencies.

Expanding that electronic collaboration to the Missouri Department of Revenue (DOR), OSCA also designed an electronic interface from courts using the statewide case management system that provides an automated data transfer of traffic disposition information. This transfer, called **Electronic Traffic Reporting**, occurs at least once daily and brings courts into compliance with statutes on traffic disposition reporting and allows DOR to comply with strict federal rules on reporting conviction data to the Commercial Driver's License Information System. DOR is also able to forward the MSHP the data they require including drug and alcohol dispositions, allowing this triangle of state agencies to increase public safety for Missourians.

Working with the Victim Rights Office of the Department of Public Safety, OSCA designed a system to electronically transmit critical court information to registered victims. The **Missouri Victims Automated Notification System (MOVANS)** provides telephone or e-mail notification to registered victims regarding commitments and releases, jail detainments and releases, court hearing dates and times, dispositions and juvenile information. Victims are afforded the rights to this information per Statute 595.209.

Web Presence
Excitement and expectation about the OSCA developed software, Case.net, has continued to grow this year as additional courts were added and a major upgrade of the system was accomplished. Attorneys, litigants and the Missouri public routinely use Case.net to search for public case information using name, case number, filing date, judge or commissioner information, or Missouri Bar Numbers without making a trip to the courthouse or having to wait for a clerk to be able to assist them by looking up or printing a file. System users can perform statewide searches for information about a person. Missouri attorneys can follow cases they are involved in online by typing in their Missouri Bar Number. Additionally, all system users are able to view the court calendars of judges and commissioners. A branch of the system allows the juvenile officers to search for information about the children they serve by entering an additional layer of security and accessing "Secure Case.Net" to view their client's information.

Case.net is the most widely recognized automation feature of the courts, as is evidenced by the approximately 86 million hits it receives each year. It is also the one element that we receive increasing public requests. For court information to post on Case.net, a court must first be using the statewide case management system. With just under half of the state not yet posting to Case.net (especially noticeable is the St. Louis City information that is missing at this time), OSCA receives almost daily requests from the public asking why certain counties are not yet showing their information. Public reliance on this service continues to grow and we continue to strengthen the system to handle increased demand.

Another major accomplishment with web-based applications was the successful implementation of the new 'dot-GOV' naming standard for Missouri government web pages and Internet e-mail. Approximately 5000 Judiciary Internet e-mail addresses were transitioned to the address "@courts.mo.gov" over a six month transition period. This

transition gave courts time to contact their local communities with the change and use up any remaining business cards and letterhead instead of increasing overhead by ordering all new information immediately. All judicial web pages and applications were also transitioned to the new address www.courts.mo.gov.

Privatization Efforts

The Division of Information Technology participated in the technology efforts needed for the privatization of the Fine Collection Center. DBA staff members worked quickly to research and implement a new 'primary/standby' database environment as part of this project. They accomplished in days what normally would have taken weeks to research, test and implement. Network communications staff developed the infrastructure necessary to allow data exchange between OSCA and the state selected vendor of the privatization effort. Based on a desire to rapidly move staff and resources to the vendor's payroll and realize cost savings, this effort was accomplished within approximately 45 days. As a result of these technical activities, the vendor now offers Missouri courts the ability to collect past due fines and fees owed to them without using state resources to do so.

Planned Projects

- With continued funding, rollout of the statewide **case management system** will continue. Over half of the Missouri court caseload is now handled by this system.

- Continued addition of the **juvenile offices** to the case management system is planned if grant and state funding remain available.

- The planned upgrade of the statewide case management system which is currently underway will be completed in 2005. Phase II incorporates more complex changes, and has been very well received by current users as it simplifies the software in significant business process areas such as accounting and criminal disposition.

- An **electronic filing** system is a top business need for both courts and their clientele. Prior to implementing an electronic filing solution, however, the technology must be able to support an intake of information without a need for double entry on the part of clerks, and without breaching any security firewalls for those attempting to submit information. Emerging XML standards, which we are watching closely, may provide the needed technology foundation to support electronic filing. However, with tight budgets continuing, this project will likely be moved into out years.

- **Document management** is a highly complex subject that incorporates traditional retention and disposal of records, electronic and photographic imaging of records, the flow of documents through business processes, and the creation, storage, retrieval, access and security of documents. With funding, OSCA-IT will establish the scope and business requirements for a document management system

to support the core business activities of courts and identify "best practices" to manage the massive records burden currently facing courts. Tight budgets will likely postpone progress on this project again in the coming year.

- A **database server consolidation** strategy was approved this year by the Missouri Court Automation Committee. In an effort to maximize server resources, reduce licensing costs and increase supportability without any declination in performance, OSCA began immediate implementation of this strategy. To date, seven judicial circuits' databases have been relocated to a central data center location, with plans to consolidate an additional 18 – 20 in the coming year. This has a potential cost savings of $100,000 in software licensing fees on an annual basis.

Accumulated Demand

The Missouri Court Automation Program has significantly changed the way that Missouri courts do business. The family of automated systems must continue to be supported now that they have become a part of the business culture of the courts and have set an expectation of what services courts will be able to provide to Missouri citizens and other state agencies in the future.

Shrinking budgets and a lack of resources present a series of unique challenges for the Missouri Court Automation Program. There is a need to balance a requirement for specialized staff, an increasing demand for new technology solutions and timely assistance with IT support. We are also faced with retaining qualified IT staff in the government sector while resources are slim.

Just less than half of the state courts are still waiting to receive the statewide case management system. In addition, courts that are currently using JIS will be ready to complete phase two of the upgrade process, making the system more useful and compatible with Missouri court processes. Juvenile courts are now ready to be incorporated into the case management system and begin automating their processes and better manage their increasing caseloads. The program will soon be at a stage where both electronic filing and document management will become increasingly critical to courts.

Information technology solutions have helped the Judiciary improve service, increase its ability to share public information and improve its statistical reporting tools. However, technology must continue to be supported in order to continue judicial effectiveness.

Agency Profile
As a member of the judicial branch of government, a department profile was unavailable from the Office of the State Courts Administrator.

Office of Information Technology
2004 State of the State IT Report

Department of Transportation

Overview

MoDOT saw many changes in 2004, including the resignation of the department director, an interim director, and the appointment of a new director. These changes in leadership affected many internal processes and programs, including the use of Information Systems.

A multi-year IT Strategic Plan was developed and a three-year funding model called the Information Technology Improvement Program (ITIP) was put in place. An ITIP committee, with members from various business units and districts within MoDOT, was formed to give direction on information technology. The ITIP committee also acts as the Architecture Review Board to provide architectural guidance. Additionally, the Information Systems budgeting process was changed to allow review by the department, giving oversight of the Information Systems budget to the ITIP committee.

Information technology projects now go through a two-step approval process. The first step is for the ITIP committee to review the business case to see if a project should be defined in more detail. This step is essentially a feasibility review by MoDOT business leaders. If the project is feasible, then a more detailed plan and cost estimates are submitted for ITIP committee approval. A project must pass these two steps before work is commenced.

In 2004 Information Systems worked on making improvements to the MoDOT website, and particularly to the Road Conditions web page. This page is heavily used by the motoring public and is one of MoDOT's most used web pages. Other website improvements include giving a more consistent look and feel to the many pages available.

Accomplishments

Web Applications and MoDOT Web Site

Building new Web applications and web-enabling legacy applications were a continued theme for 2004. Using Java development tools in the IBM WebSphere family of products, Information Systems built several web applications that will not only help the

public get the information they are seeking in a more timely manner, but will also help MoDOT employee's better serve the public.

MoDOT rolled out a new and improved web site to the public in 2003 that initially contained about 3,000 pages of the 12,000 pages that MoDOT's original website consisted of. Since the initial rollout, Information Systems has continued to convert the remaining 9,000 pages. With this conversion the public will notice that all pages have a new look and feel, easier navigation, less complex site structure, and feedback tools.

Work Zone and Road Conditions

A new internet-based web application was implemented on MoDOT's web site to provide current Road Conditions as it pertains to weather to travelers on Missouri roads. This new map loads much quicker and is using newer JAVA technology therefore giving the public the information they are looking for in a timely manner. This map is now available at www.modot.org.

E-updates

Using Java development tools Information Systems built a new application called E-updates. The E-updates application will allow the public to sign up for electronic emails from MoDOT based on the area of the state they reside in. The information that a user might receive would be road closings, public hearings, and important news releases.

News Release System

Information Systems also created a News Release system using Java development tools. This system allows Public Information personal working for MoDOT from multiple locations around the state to post or change News Releases in a real time format.

Bid Letting System

MoDOT created a new bid letting system that will allow contractors access to bid information electronically as opposed to by fax or mail. Internal applications were also implemented to allow for the automated entry of current Bid Letting data to ensure accurate and timely information could be fed to the web site.

Gateway Guide

Information Systems continues to support the efforts of Gateway Guide, which is in the process of a transportation management system upgrade in order to provide better freeway management and real-time travel information to the public.

Branson TRIP

Information Systems is in the process of upgrading the Branson TRIP application to replace old servers, update the web pages and serve the construction map internally. This is being done to provide better information to the public traveling in the Branson area.

Motor Carrier Systems Consolidation:

In accordance with the Governor's executive order, all Motor Carrier Services were consolidated under MoDOT in 2003. In the spring of 2004, MoDOT awarded a contract for a new, integrated computer system to replace the following outdated, non-integrated Motor Carrier legacy systems: Overweight/Over-dimension Permitting, Interstate Fuel Tax Authority, Interstate Registration Program, Single State Registration Systems, Interstate Exempt/Intrastate Regulatory and Enforcement, Hazardous Waste/Waste Tire. The system will include an accounting module and a carrier profile. It will also allow carriers to conduct business with the state over the Internet.

This system will be the first truly integrated Motor Carrier system in the country. The project was officially kicked off in August and will be completed in the fall of 2005.

Transportation Management System (TMS)

The Transportation Management System is an ongoing project that was implemented in March 1999. TMS integrates geographically oriented transportation data from multiple sources such as bridge, pavement, safety, traffic monitoring, traffic congestion, outdoor advertising (billboards), junkyards and travelways. TMS allows MoDOT staff to graphically view and analyze data to make better decisions concerning preservation and construction of transportation systems. TMS is based upon a common location referencing system (LRS) that utilizes software to link graphical information to tabular information through the use of relational databases. Several enhancements to the modules within TMS were completed this year.

Phase I of Real Property was completed in November, 2004. This project creates an inventory database within TMS that allow us to know more details about the property we own and to manage the valuation, purchase, leasing and disposal of that property. This will demonstrate responsible use of taxpayers' money and be the first and best source of information about MoDOT. It will allow us to minimize our investment in unproductive property, sell and lease property at favorable prices and rates, and conduct our operations on land of appropriate values while disposing of properties that have appreciated to values of higher uses.

Statewide Transportation Improvement Program Automation

Automation of the STIP (Statewide Transportation Improvement Program) began in July of 2004 and is due to be completed in June of 2005. The automation of STIP provides MoDOT a project programming application that is easy to use and tracks information needed to support the program process. The program process includes funding,

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scheduling and reporting on future needs that have been identified, current projects that will be awarded in the next five years, projects that have been awarded, and evaluating project and program success.

Fleet Management System

MoDOT's Fleet system was implemented in November 1997 and has been instrumental in tracking specific information regarding MoDOT's fleet. Warranty, service, repair, inspection and usage information is entered into the Fleet system from locations across the state providing up-to-date information to aid MoDOT in managing its fleet of vehicles. Earlier this fall, MoDOT began the process of web-enabling the Fleet system. Doing so will reduce support and implementation costs as well as provide a new user-friendly web-based interface. In addition, the Office of Administration has embarked on an effort to consolidate the state equipment information into a central database to help the state collectively manage its resources better. MoDOT reports data about its fleet to OA on a monthly basis by generating reports from the Fleet Management system.

Implementation of Data Warehousing Architecture and Conversion of Existing Data Marts:

In the fall of 2004, MoDOT implemented a more supportable, consistent, and scalable data warehouse environment that will provide the architecture needed to support existing data marts and to implement new data warehousing projects. Existing data marts were converted and moved to the new structure on updated hardware using a leading Extract, Transform, and Load (ETL) tool.

Having a standardized Data Warehousing environment and an ETL tool in place will significantly reduce the amount of effort required to support existing decision support systems and will allow for more efficient and effective implementation of new data warehouse/data integration functionality.

Windows Server Consolidation

MoDOT completed consolidation of its Intel Server infrastructure by decommissioning six-year-old servers in District offices and Jefferson City and installing fewer but more powerful servers in Jefferson City. Most District offices now have a single but more powerful Intel server and no backup equipment since backups are now being done centrally over the fiber-based Wide Area Network (WAN). District users now access most resources via the MoDOT WAN.

Data Center Upgrade

Information Systems reduced vulnerability to risk by relocating the main data center. This was prompted due to factors such as aging and inadequate environmental controls, lack of floor space, and cramped working conditions. This relocation also allowed the

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opportunity to improve reliability through the installation of a diesel generator which will provide power to critical systems during utility power outages.

AIX Systems Upgrade

Servers that utilize IBM's version of the UNIX operating system, AIX, form the platform upon which most of MoDOT's large databases reside. These databases are used to provide business information daily. It is critical that servers provide the computing power to create reports promptly. This year MoDOT purchased three large AIX servers that power both existing and new databases. Two of these servers will provide much of the capacity required for the new Motor Carrier System application and databases. Older machines have been retired after the applications and data were removed from them.

Storage System Upgrade

MoDOT kept pace with its growing data storage needs by purchasing one additional Enterprise Storage System (ESS) unit complete with faster processors and higher density disk drives as well as upgrading an existing ESS unit. MoDOT now has over 110 Terabytes of available storage in the Storage Area Network comprising the three ESS units. Most online data, from financial to design to simple Word documents, are now stored on these units. Additional cache memory was also purchased to increase throughput on the ESS systems. The Storage Area Network provides much better storage management than stand-alone server disk storage, and allows better utilization of the storage disks themselves.

Lotus Notes/Domino Upgrade

MoDOT has used Lotus Notes for over 10 years, both for applications and for email. It has been MoDOT's sole email platform since late 1998. After the implementation of version 6 in 2003, problems were discovered when running Lotus Notes with certain applications. With the advent of Version 6.5.2, the problems were corrected and a project to roll out the Lotus Notes 6.5.2 client began. The project is currently scheduled for completion by December 31, 2004.

Disadvantaged Business Enterprise Software

In 2004 MoDOT implemented a new application called Unified Certification Process. This new application is intended to serve as a "one stop shop" for Minority/Women Disadvantaged Business Enterprise (DBE) applications and certifications, and also will develop a single DBE Directory. This system will provide the flexibility to track additional data related to civil rights issues including trainees, compliance and DBE verification as well as the ability to help perform the annual goal setting requirements for the Department. To date MoDOT has 4 partners for the certification program they are City of Kansas City, KCATA, Lambert St. Louis, and Metro St. Louis. There are plans to add additional partners in 2005.

Chief Counsel Automated Management System

This multi-phased, multi-year project began with identification of the functional requirements for the Chief Counsel staff to track and manage on-going litigation for the Department. Efforts began in late summer of 2003 to begin installation.

Configuration, customization, conversion of data from existing systems and testing are underway with planned completion by the end of 2005.

Additional Telecommunications Implementations

Additional wireless LANs were implemented for several District offices and some existing dial-up connections were replaced with wireless WAN technology. All outlying buildings in the Districts and Resident Engineer offices still outfitted with Token Ring networks were converted to Ethernet where possible. Many dial-up connections were replaced with VPN solutions, generating cost savings and increasing productivity.

Routine Maintenance Jobs Reporting

Information Systems created a catalog to tie maintenance job number and location information (from TMS) together. This catalog allows users to produce reports that are required by FHWA reports and reports for internal management purposes.

Enterprise Architecture

Information Systems completed enterprise architecture documentation including current, future, gap and migration strategies for Transportation Planning Unit and Public Information and Outreach Customer Service Center.

Planned Projects

AWOS (Automated Weather Observation System)

Information Systems is in the process of creating a website that will display real-time weather information from the 13 airports that MoDOT has installed AWOS systems at. This information will not only be helpful to pilots, but it has been determined that it could also be useful for the general traveling public and MoDOT maintenance and construction personnel.

General Services Diagnostic Software

Implement diagnostic software, laptop computers, and related hardware for use by field mechanics. This will assist MoDOT's mechanics in diagnosing equipment problems in a more timely and efficient manner.

Collision Diagramming (TMS)

Implement a collision diagramming tool that allows MoDOT's engineering staff to determine if there is a consistent accident pattern at a particular location. This in turn will allow design staff to correct a possible design flaw.

Imaging Component for Transportation Management System (TMS)

This project will provide the ability to view digital images from existing TMS inventory applications. Applications to load (into TMS) and index digital images from a user defined directory will be developed. The ability to index images will provide for quick and easy access to images. A mechanism to associate current inventories with images will also be provided. This functionality will allow access to an image from existing TMS inventory application at the push of a button.

Develop imaging component to include digital photos, video (including audio and visual), bridge plans and sketches. These will be tied to bridge inspections in TMS. This will provide efficient retrieval of all the data associated with bridge inspections.

Real Property Inventory Application for TMS

Within TMS, complete the application to inventory and manage MoDOT excess property, including acquisition and disposal of capital properties. This will provide a database for the storage and abstraction of data relating to all aspects of MoDOT-owned real estate. Data should include information on the acquisition such as legal description and title, purchase price and previous ownership, construction details, leasing history and current lease data, history of use, etc. Both the legislature and the Commission have a continuing interest in reporting from this inventory.

Medical and Life Data Management System

This solution will provide a medical and life insurance data management tool that will track payment and benefit information for active employees, retirees, spouses, dependents and surviving spouse. This application will also provide accounting/ financial information that will be used for various reporting requirements plus reporting information to the medical and insurance board. Included with the new tool is the capability to query the database to create reports. This data will also be used in decision-making scenarios. The new solution will also allow employees in other divisions and districts to enter and view information on-line.

MoDOT's Internet Site

Enhancement will continue to be made to MoDOT's Internet site to continuing providing meaningful information to the traveling public.

I70 Fiber Optic Network

MoDOT plans on a SONET Dense Wave Division Multiplexing (DWDM) network connecting the St. Louis and Kansas City Intelligent Transportation Systems (ITS) to Jefferson City. This network is the first phase of a statewide Transportation Management network that will also allow the expansion of the Intelligent Transportation Systems to rural areas. A second phase will be along the East side of Missouri.

IP-Based Call Centers

Information Systems is installing a voice over IP system (VOIP) system for our Motor Carrier Services Division. This project will be completed in early 2005.

MoDOT also maintains a call center in every District office, one in each Traffic Management Center, and one at the general headquarters building. An upcoming project will provide an IP Telephony based solution linking incoming calls to customer account information enabling Call Center agents to better serve the public at large.

Enterprise Architecture

Continued work on the enterprise architecture is planned for 2005 to include technical standards for security and network management, and business architecture documentation in the financial transactions, Right of Way and Information Systems processes areas. The financial transactions project will be part of an evaluation of internal controls in compliance with MoDOT's financial processes and internal controls.

Project Management Software

Acquire and implement an enterprise-wide project management tool to assist with program, portfolio management and research management as it relates to projects.

511

Information Systems will be supporting MoDOT's efforts to create a statewide 511 traveler information system.

SiteManager Acceleration Solution

MoDOT's SiteManager System is a key component in effectively managing construction projects. Many users of the system are in remote buildings or locations that do not have high-speed network connectivity and are thus connected via dial-up connections. Dial-up connections were providing extremely slow start-up times. By implementing Microsoft terminal services, dial-up users can access the system very quickly with minimal start-up times. The terminal services functionality is expected to be implemented by early 2005.

Business Intelligence Technology Upgrade

MoDOT has used Business Intelligence (BI) tools from Cognos Corporation for many years as the foundation for its information reporting system. This year Information Systems began to work on the implementation of ReportNet. This product allows all reports, both ad hoc query and canned, to be browser-based and it also greatly eases the burden of creating meaningful reports quickly. The current goal is to complete the implementation, training, and conversion effort by third quarter of 2005.

Oracle Upgrade

Oracle is the standard RDBMS at MoDOT. It is imperative that currency be maintained because many of the mission critical systems are built on Oracle databases. This year Information Systems began to plan for upgrading to the latest version of Oracle. Current plans indicate the upgrade will start in the 3rd quarter of 2005 and be completed in early 2006. Once Oracle is upgraded, it will improve performance, as the Oracle Corporation built new functionality into its latest release that should reduce the run times of many key financial and core business reports.

Rational Unified Process (RUP)

Software development intensive projects can be controlled by implementing the Rational Unified Process (RUP). At the heart of the process is the single modeling language known as the Unified Modeling Language (UML). UML is designed to facilitate software intensive projects from requirements to retirement in the same idiom and in the same language. In conjunction with the process implementation, several Rational tools will be implemented during 2005 to facilitate the rollout, acceptance and implementation of the new processes.

Capability Maturity Model Integrated (CMMI)

Information Systems is in the process of preparing for a CMMI Standards review. Studies have shown that achieving CMMI Level 2 standards, if applied in a practical, measurement-driven way, results in decreased project costs, increased schedule predictability, improved product quality, increased customer satisfaction, and a positive

return on investment. This review will set a baseline for our current standards and allow us to plan for future improvements.

Accumulated Demand

Information Systems continues to have a backlog of IT requests originating from the divisions and districts within MoDOT. Included in this backlog are requests for new software, updates to current software, requests for new hardware, and requests for new technology such as wireless devices. The current project list has a backlog of 45 projects with an estimated cost of almost ten million dollars.

General Department Profile (2004)

Department Name
Missouri Department of Transportation

Street Address	City	Zip
105 West Capitol Avenue	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
751-2551	*526-2484*	*www.modot.mo.gov*

Department Director
Pete Rahn

Number of FTE (entire department)	Approximate number of citizens served
6400	*All Missouri*

Agency Mission (brief statement)
Taking care of and improving Missouri's transportation system.

Department CIO and IT Division Profile (2004)

Department Name
Information Systems

Department CIO Name
Lew Davison

Street Address	City	Zip
601 West Main Street	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
526-2949	*751-2839*	*Lew.davison@modot.mo.gov*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

IT Division Name	Website URL
Information Systems Division	

Number IT FTE (located in central office)	Number IT FTE (located in field)
104	*32*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
0	*0*

Security Officer Name	Phone No.	E-mail
Steve Derendinger	*522-1296*	*Steve.derendinger@modot.mo.gov*

Privacy Officer Name	Phone No.	E-mail

ITAB Alternate Name	Phone No.	E-mail
Kim Potzmann	*526-2307*	*Kim.potzmann@modot.mo.gov*

SDC Steering Committee Rep Name	Phone No.	E-mail
Leonard Hodges	*751-7075*	*Leonard.hodges@modot.mo.gov*

Department Technology Profile (2004)

Department Name	
Missouri Department of Transportation	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*T3 Solution, Intel based mainframe*
PC Servers	*Dell and Compaq with Windows 2000*
Mid-range	*IBM RS6000 with AIX*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Dell with Windows 2000 and Compaq with Windows NT*
Dumb terminal	*None*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
SNA and TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dialup, VPN, and LAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee Netshield/Groupshield and TrendMicro*
Desktop	*McAfee VirusShield*
Internet	*PIX Firewall, Cisco and Computer Associates intrusion detection*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, SQL, DB2	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
COBOL, Advantage:Gen, WebSphere, Versata	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Telecommunications (T1, Frame Relay, etc.)
Packet over SONET and Frame Relay
GIS (ArcView, MapInfo)
ArcView and ArcInfo

Office of Information Technology
2004 State of the State IT Report

Office of the State Treasurer

Accomplishments

ACH Inquiry System

The ACH Inquiry System was completed in spring of 2003. Agencies such as the Office of Administration, Department of Social Services and the Department of Revenue participated in a pilot of the system. The pilot was completed in the summer of 2003. In the fall of 2003 the ACH Inquiry System was made available to all State of Missouri agencies. In an effort to build on the current check inquiry system, the Missouri State Treasurer's Office developed a similar inquiry system for ACH transfers of State of Missouri funds. The ACH Inquiry System provides the State Treasurer's Office staff and state agencies the ability to check the status of ACH transfers. The system reflects the status of the transfer.

Previously, an inquiry system for ACH transfers was not available to state agencies and the agencies were dependent on the State Treasurer's Office for information pertaining to a transfer. STO developed the ACH Inquiry System in-house using Visual Basic .NET and Microsoft SQL Server to reduce the cost of the system to the State of Missouri agencies. The system allows the State Treasurer's Office and other agencies immediate access via a browser to the status of an ACH transfer issued by their agency.

Planned Projects

Unclaimed Property Management System Upgrade

The Missouri State Treasurer's Office (STO) is in the process of planning for a system upgrade to the Unclaimed Property Management System (UPMS). The system is an application provided by ACS Wagers. STO currently uses a FoxPro version of the software. The new version is a Microsoft SQL Server version of the software, UPMS2000. The upgrade includes many enhancements to the end user and the administrator of the software. The upgrade will allow for a decrease in maintenance and

support since technical staff are skilled and experienced with the MS-SQL Server database. Completion of the upgrade is expected in the winter of 2005.

Unclaimed Property Website

The STO is the process of re-designing and re-developing the Unclaimed Property Website for the general public. The application is being re-written in VB.Net to increase the scalability of the application and allow for additional enhancements. The majority of claims for unclaimed property come from individuals visiting the State Treasurer's website. Completion of the upgrade is expected in summer of 2005.

Missouri Linked Deposits System

STO is in the process of upgrading and enhancing the Missouri Linked Deposits System. The system is currently maintained in a prior version of Visual Basic. The application is being rewritten in VB.NET for maintenance and scalability purposes. Enhancements to the system are being made as the application is being upgraded to the new version of Microsoft's development software. Completion of the upgrade is expected by early summer 2005.

Accumulated Demand

The demand for the development of in-house applications remains steady in the State Treasurer's Office. In-house application solutions are being considered instead of packaged products that don't meet the needs and contracted services that are too high in cost.

General Department Profile (2004)

Department Name
Missouri State Treasurer's Office

Street Address	City	Zip
301 West High Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
(573) 751-1360	*(573) 751-0343*	*http://www.treasurer.missouri.gov*

Department Director
Nancy Farmer, Treasurer; Chuck Miller, Deputy Treasurer

Number of FTE (entire department)	Approximate number of citizens served
50	*Unknown*

Agency Mission (brief statement)
Utilize public resources to responsibly manage state funds, to promote economic growth and enhance the lives of Missourians.

Department CIO and IT Division Profile (2004)

Department Name		
Missouri State Treasurer's Office		
Department CIO Name		
Scott Peters		

Street Address	City	Zip
301 West High Street	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 751-8522	*(573) 526-5011*	scott.peters@treasurer.mo.gov

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)		
Member in Information Technology Advisory Board for the State of Missouri *Missouri Certified Project Manager*		

IT Division Name	Website URL	
Division of Information Technology	*NA*	

Number IT FTE (located in central office)	Number IT FTE (located in field)	
3	*0*	

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded	
$0	*NA*	

Security Officer Name	Phone No.	E-mail
Kim Evers	*751-8771*	Kim.evers@treasurer.mo.gov
Privacy Officer Name	Phone No.	E-mail
NA	*NA*	*NA*
ITAB Alternate Name	Phone No.	E-mail
Daniel Moeller	*751-7280*	Daniel.moeller@treasurer.mo.gov
SDC Steering Committee Rep Name	Phone No.	E-mail
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Department Technology Profile (2004)

Department Name	
Missouri State Treasurer's Office	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Dell PowerEdge*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Dell / Precision*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP; SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Fiber; Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-virus*
Desktop	*Norton Anti-virus*
Internet	*Norton Anti-virus*
Help Desk Packages (Magic, GWI)	
NA	
Database Management Systems (DB2, Oracle, SQL, etc.)	
MS SQL Server	
Development Tools (COBOL, CICS, Advantage:Gen, WebSphere, .NET, etc.)	
MS Visual Basic; .NET	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

NA	
Telecommunications (T1, Frame Relay, etc.)	
Fiber	
GIS (ArcView, MapInfo)	
NA	